VOL. I. MARCH, 1908. NO. 1.

Training College Record.

Contents.

INTRODUCTION.

The President in his address suggested that the proceedings of the Association should be printed, there was a general agreement that this should be done this year as an experiment. There were no funds available for such a purpose, a letter was therefore addressed to the Principals of Colleges asking that each college should guarantee one pound, the response was favourable and the first number of the Record is the result. The question of cost and periodical publication will be discussed by the Committee, and proposals will be submitted to a meeting of members.

There are necessarily omissions in a number prepared at short notice, there should be information and news from the colleges, each issue should contain a resumé of the work done in the Training Colleges of other countries, and there should further be descriptions of actual plans that have proved to be effective. The review of books specially relating to the studies and work of Training Colleges should be a special feature of the Record, but such books should not be confined to English publications.

If the "Record" be issued periodically, the supply of suitable matter will present no serious difficulty.

The Editor is indebted to the writers of papers and reviews, demands have been made upon them at the busiest part of the session, yet they have readily given their services.

M. R. W.

Newcastle-upon-Tyne,
February, 1908.

Training College Association.

President:

PROFESSOR MARK R. WRIGHT, Armstrong College, Newcastle-on-Tyne.

Ex-President:

REV. H. WESLEY DENNIS, St. John's College, Battersea, S.W.

Vice-Presidents:

MISS S. WALKER, Southlands College, Battersea., S.W.

REV. R. HUDSON, St. Mark's College, Chelsea, S.W.

Hon. Sec. and Treasurer:

MR. H. E. GRIFFITHS, St. John's College, Battersea, S.W.

THE ANNUAL MEETING.

THE SIXTEENTH ANNUAL MEETING was held at the National Society's House, 19, Great Peter Street, Westminster, on Tuesday, December 17th, 1907.

1. The President (Rev. H. Wesley Dennis) took the chair at 10·30 a.m. There was a large attendance of members:—The following officials of the Board of Education were present:—Mr. P. A. Barnett, Dr. Airey, Dr. Newman, and Dr. Eichholz.

2. The Minutes of the last Annual Meeting were read by the Secretary and confirmed.

3. The Report and Balance Sheet for 1907 (see page 5), were adopted on the motion of Rev. Canon Martin and Miss Dunlop.

4. Miss Smith (Whitelands) and Rev. J. H. Hannah were appointed scrutineers of the Voting Papers for Vice-Presidents.

5. The President for 1908 (Professor Mark R. Wright) took the chair.

6. A cordial vote of thanks to the outgoing officers was proposed by Rev. Canon Stevenson, seconded by

7. The President then delivered the Presidential Address (see page 17), for which he was cordially thanked on the motion of the Rev. Prebendary Hobson and Miss Dunlop. It was decided to print and circulate the Address as usual.

8. A discussion ensued on "The Simplification and the Strengthening of the Training Colleges Curricula. (The papers and the discussion appear on page 30).

9. The following elections for 1908 were declared:—Vice-Presidents, Miss Walker (Southlands), Rev. R. Hudson (St. Mark's); Hon. Secretary and Treasurer, Mr. H. E. Griffiths.

10. The proposal of The Teachers' Guild to hold a combined Educational Congress was then brought forward by Rev. H. W. Dennis, who proposed that the matter be referred to the Committee with power to spend what may be necessary in the matter. Carried.

11. The question of the date of the next Annual Meeting was discussed, with the result that the Committee should have before them when settling the date, the fact that the bias of this Meeting was in favour of the corresponding week in December.

12. Professor Adamson moved the following resolution:—*Re* General suggestions, for the practice of Teaching. (New Reg. p. 58.) "This Association earnestly deprecates any endeavour on the part of the Board of Education to impose a uniform system upon the Training Colleges, and respectfully emphasises the necessity in the present experimental stage of training and under the great diversity of conditions, of allowing as much liberty and elasticity as possible to the various Colleges." Mr. W. T. Phipps seconded the resolution and it was carried unanimously.

13. An Address was given by Sir Lauder Brunton, M.D., F.R.S., on "Training Colleges and the National Health." An interesting discussion followed the reading of the paper, in which Rev. R. Hudson, Miss Allan, Professor Welton, and others took part. On the motion of the President, seconded by Miss Bishop, a hearty vote of thanks was given to Sir Lauder Brunton for his valuable paper. (Sir Lauder Brunton's paper appears

student should be received into a Training College directly on the conclusion of his 'Bursary' period without having had some substantial experience (say not less than three months) in the regular work of a Public Elementary School under the direction of the Head Teacher and Staff." The resolution was seconded by Miss Bishop. Dr. Workman, Rev. R. Hudson, Miss Forth, Rev. D. J. Thomas, Prof. Adamson, and Prof. Welton spoke. The motion was carried unanimously.

15. Rev. H. W. Dennis moved the following:—"This Association is of opinion that it is necessary in the interests of efficiency that students before admission to a Training College should have acquired facility in the following exercises:—(1) Clear articulation. (2) Vocal music. (3) Manual instruction and (for women) needlework. The Association believes that the necessary training should be given during the school period when habits are readily formed, and that the function of the Training College is to train students in the application of these exercises in school. The Association feels that this resolution becomes strikingly urgent having regard to the 'Bursar' System." Miss Bishop seconded. A long discussion ensued, and the motion was carried unanimously.

16. It was decided to send the resolutions in Nos. 12, 14 and 15 (*a*) to the Board of Education, and (*b*) to the Education Authorities of the Country.

17. The Meeting closed with a hearty vote of thanks to the President for his conduct of the Meeting.

REPORT FOR THE YEAR 1907.

To the Members of the Association.

Your Committee has pleasure in submitting the following Report for the past year:—

The Asscciation numbers 240 members and 61 Colleges (Residential and Day) are represented.

The Annual General Meeting was held on December 18th, 1906, at the Caxton Hall, Westminster. There were two sessions and the meetings were very well attended. A successful Conversazione was held on the evening of December 17th, at St. John's College, Battersea, by kind invitation of the Principal and Council of the College.

The question of classification in the results of the Preliminary Certificate Examination has been further considered by the Committee this year, and the following resolution was sent to the Board in January on the receipt of an unfavourable reply to the Association's request for classification :—"The Association deeply regrets to find that the Board has not been able to grant any concession to the practically unanimous view of the authorities of the Training Colleges. It expresses the hope that the matter, as it relates to subsequent years, will be reconsidered by the Board."

At the March meeting it was again decided to press for Classification (without order of merit) in the results of the Preliminary Certificate Examination.

The Association has also been in communication with the Board with regard to various points affecting the Second Year List such as (*a*) The discouragement of the all-round Student, (*b*) The College marks in the practical subjects, *e.g.* Music, Teaching, (*c*) The varying standard of the requirements in optional subjects.

The question of the value of a Third Year (at home or abroad), apart from the question of completing a degree has been represented to the Board, but the Board could not see its way to alter its regulation.

The new Training College regulations naturally came up for discussion at the October Meeting, and the following important resolutions were forwarded to the Board :—

I.—"This Association deeply regrets that regulations should have been issued which limit the discretion of the College authorities in the selection of the most suitable candidates for admission."

II.—"This Association regards it of the utmost importance that the Colleges should retain the liberty hitherto afforded them of interviewing their candidates without any extra charge upon the Colleges. They wish to point out that the interview affords an opportunity for the College medical examination which is obligatory under the Board's regulations, and to which they also attach the greatest importance."

tions, when taken in subjects and of a standard that exempts from the London Matriculation Examination, should be considered by the Board as equivalent to the London Matriculation Examination and judged by the same rules."

IV.—"The Committee notes with satisfaction that the obligations of service underaken by a student in accepting the King's Scholarship are more clearly defined than in former years. (App. B.)"

V.—"This Association greatly regrets the introduction of a regulation rendering candidates admissible to Training Colleges before 18 years of age, and ventures to protest against the action of the Board in introducing a regulation so intimately affecting the social and intellectual life of the Colleges without previous consultation with the College Authorities."

The scheme of the Teachers' Guild for a combined Educational Congress (referred to in the last Annual Report) has again been discussed in Committee, and it was eventually decided to bring it up at the Annual Meeting for final discussion.

It was felt by the Committee that members generally should have an opportunity of voting on the date of the next Annual Meeting, so that this matter will also be found on the Agenda of this meeting.

In accordance with Rule 5, Professor Mark R. Wright was at the March Meeting elected President for 1908.

At the October Meeting nominations were received for the posts of Vice-Presidents and Hon. Secretary. In the case of Hon. Secretary, only one nomination was received. Voting papers have been issued in the case of the Vice-Presidents, and the result will be declared at the Annnal Meeting.

In conclusion the Committee cordially thanks the members of the Association for their continued co-operation and support.

Signed, on behalf of the Committee,

H. E. GRIFFITHS,

BALANCE SHEET, 1907.

	£ s. d.		£ s. d.
iptions—		Deficit, 1906	6 12 7
6d.	24 17 6	Expenses of Annual Meeting, 1906—	
		Hire of Hall £3 3 0	
		Tea 2 10 0	
		Expenses of Special	
		Speakers 1 9 10	
		Conversazione 2 12 6	
		Sundries 1 3 0	
			10 18 4
		Printing	5 15 1
		Postage and Office Expenses ..	4 5 3
.. .. ..	2 13 9		
	£27 11 3		£27 11 3

Audited and found correct,

(*Signed*) E. C. SIMPSON.

RULES.

1.—TITLE.

The Association shall be called "The Training College Association."

2.—OBJECT.

To furnish opportunities for the discussion of educational problems, especially those relating to the Training of Teachers; and for the expression of a collective opinion thereon.

3.—MEMBERSHIP.

The Principals, and all other Members of the Teaching Staffs of Training Colleges and the Training Departments of other Institutions in which the Course of Training is accepted by the Board of Education for the purposes of "Registration," shall be eligible as Members of the Association.

4.—SUBSCRIPTION.

The Annual Subscription shall be Half-a-crown, payable on the 1st of January in each year. Any Member whose subscription is in arrear for more than twelve months shall, after due notice, cease to belong to the Association.

5.—OFFICERS.

The Officers shall be a President, two Vice-Presidents (one a woman), and a Secretary, who shall also be Treasurer.

ELECTION OF OFFICERS.—All of these shall retire at each Annual Meeting, but shall be eligible for re-election. Except in the event of the re-nomination for special reasons of the President, one of the Vice-Presidents shall be elected as President for the succeeding year at the Committee Meeting held in March previously.

The Vice-Presidents and Secretary shall be nominated at the October Committee Meeting.

In the event of there being more than one nomination for each post, voting papers shall be sent to Members of the Association. These must be returned to the Secretary, and the result shall be announced at the Annual Meeting of the Association.

at the March Committee Meeting. The arrangements for this Meeting shall be in the hands of a Sub-Committee appointed for the purpose.

7.—Committee.

Election.—The Committee shall consist of the Principal or Head of the Training Department of each College, and one Member from the staff of each College. This Member shall be elected by the Members of the Association in the College. The Officers and Ex-President are *ex-officio* Members of the Committee.

Vacancies.—Any vacancy in the Committee occurring during the course of the year among the representatives of the Colleges shall be filled up by the Colleges concerned, or in the posts of President, Vice-Presidents, and Secretary, by the Committee. A Vice-President thus appointed shall not succeed to the Presidency without the opportunity being afforded to all the Members of the Association to nominate other candidates, and, if necessary, to elect the President by vote.

Meetings.—The Committee shall meet at least twice a year, viz., on 2nd Friday in March and October. Ten shall form a quorum.

Agenda.—Notices of Meetings, with full Agenda, shall be sent to each Member of the Committee seven clear days before the date fixed for the Meeting, together with a complete summary of the proceedings of the preceding Meeting.

All notices of motion for the Annual Meeting must be sent to the Secretary at least four clear weeks before the date fixed for the Meeting.

The Committee shall arrange for the Annual Meeting of the Association, at which a report for the year and a balance-sheet shall be submitted. All Members of the Association shall receive a summary of the business transacted at this Annual Meeting.

Special Meetings of the Association, or of the Committee, may be summoned at the discretion of the President, or by order of the Committee, or on the signed request of not less than 20 Members of the Association.

In the case of any College, if neither of the regular

8.—Alteration of Rules.

None of the Rules shall be altered except at the Annual Meeting, and then only in case there is a majority of two-thirds in favour of the proposed alteration, or at a Special Meeting of the Association convened for this purpose.

In the case of a Special Meeting notice shall be sent to all Members, and no alteration of the Rules can be made unless approved by two-thirds of the Members present.

SCHEME OF STANDING ORDERS FOR ANY GENERAL MEETING.

1.—The proposer of a Motion shall be allowed 15 minutes for his speech.

2.—Each succeeding speaker shall be allowed 5 minutes.

3.—All Amendments must be submitted to the Chairman, in writing, with the name of the mover attached.

(A.) Whenever an Amendment is made upon any Motion, no further Amendment shall be taken into consideration until the previous Amendment is disposed of.

(B.) If any Amendment be carried, it shall then be put as a substantive Motion, and then a further amendment may be moved upon it.

(C.) If any Amendment be negatived then a further Amendment may be moved to the original question.

4.—The decision of the Chairman on any point shall be final.

5.—At a General Meeting no Member shall be permitted to speak more than once on the same proposition, except the proposer, who shall have the right of reply before the original proposition or any amendment to the same is put

6.—Every resolution shall be put to the vote by a show of hands.

7.—Any debate may be closed by a resolution, "That the question be now put" being moved, seconded and

the purpose of proposing such a motion. If an amendment is under discussion, the motion "That the question be now put" shall apply only to that amendment.

8.—The Agenda of any public session, if not finished, shall be taken after the business of the arranged Agenda of any subsequent session has been disposed of.

9.—When an extension of time is allowed to a speaker, it shall be at the discretion of the Chairman, but it shall not exceed five minutes.

10.—No motion to suspend a standing order for the purpose of altering the order of business shall be accepted unless supported by 20 members present. This motion shall be put to the meeting without debate.

LIST OF MEMBERS.

The Names are in Alphabetical Order in each College.

Aberystwith (University College):
Miss Gibson.

Avery Hill, Eltham:
Miss M. Carter.

Bangor (Normal College):
Mr. T. Botting.
,, E. R. Davies.
,, E. H. Harding.
,, D. Harris.
,, H. Williams.

Bangor (North Wales Training College):
Rev. Canon Fairchild.

Battersea (St. John's College):
Mr. T. Ayres.
Rev. S. Blofeld.
,, H. Wesley Dennis.
Mr. H. E. Griffiths.
,, E. Mills.
,, H. H. Pells.
,, W. Taylor.

Battersea (Southlands College):
Rev. J. Chapman.
Miss Harry.
,, Husbands.
,, Smiley.

Birmingham (The University):
Miss F. C. Clark.
,, Joyce.
,, E. Sowerbutts.
Mr. F. Roscoe.

Bishop's Stortford (Hockerill College):
Rev. A. E. Murray Aynsley.
Miss Crook
,, Gwinn.
,, Holman.
,, Stewart.

Brighton (Rose Hill College):
Miss Bell.
Rev. G. Corfield.
Miss Marshall.
,, Mockford.
,, B. Mockford.

Bristol (Residential College):
Rev. J. R. W. Thomas.
Miss Gowan.
,, Kay.
Mrs. Sneyd Kynnersley.
Miss Roscoe.

Bristol (University College):
Mr. T. S. Foster.
Miss D. Anstace Odell.
,, Pease.

Cambridge (Homerton College):
Miss Allan.
,, Bodkin.
,, Carter.
,, Cook.
,, Glennie.
,, Hartle.
,, Jackson.
,, Jameson.
,, Salmond.
,, Varley.
,, Waterhouse.
Mr. Wilmott.

Carmarthen (South Wales College):
Rev. Preb. Brown.
Mr. H. S. Holmes.

Chelsea (St. Mark's College):
Mr. O. Breden.
Rev. R. Hudson.
Mr. J. W. Jarvis.
,, A. W. Reed.

Chelsea (Whitelands College):
Miss Birch.
,, Clark.
,, Custance.
,, Davis.
,, Fordham.
,, Ivatt.
,, Luard.
,, Smith.

Cheltenham (St. Paul's College):
Mr. W. T. Boone.
Rev. H. A. Bren.
Mr. C. H. King.
,, T. Lyon.
,, F. G. Perrins.

Cheltenham (St. Mary's Hall):
Miss Bridgwater.
,, King.
,, Reynolds.
,, Roberts.
,, Welch.

Cheltenham (The Ladies' College):
Miss F. A. Smith.

Chester:
Rev. J. D. Best.
,, Dr. Dale.

Chichester (Bishop Otter College):
Miss Beatty.

Culham:
Mr. J. S. Davis.
Rev. A. R. Whitham.
Mr. H. W. Cousins.

Darlington:
Miss E. P. Dugdale.
,, J. C. Grenfell.
Mr. W. A. Spafford.
Mrs. Spafford.
Miss C. G. Walker.
,, E. R. T. Whyte.

Derby:
Rev. A. B. Bater.
Miss Davies.
,, Field.
,, Rawlinson.
,, Southall.
,, Ward.
,, Williams.

Durham (Bede College):
Rev. D. Jones.
,, T. Read.

Durham (St. Hild's College):
Rev. J. R. Croft.
Miss Fish.
Rev. Canon Haworth.
Miss E. Hindmarch.
,, W. Hindmarch.
,, Skinner.
,, Taylor.
,, Thomas.

Exeter (St. Luke's College):
Rev. R. H. Couchman.

Exeter (Albert Memorial College):
Rev. Prof. Parry.

Hammersmith (St. Mary's College):
Rev. Father Byrne.

Hereford:
Miss S. M. Smith.

Isleworth (Boro' Road College):
Mr. E. Barkby.
,, A. Burrell.

Kennington (St. Gabriel's College)
Miss Bishop.
,, Cooke.
Mrs. Clare Goslett.
Miss Hele.
,, Houlston.

Kensington (St. Charles's Square):
Madame O'Flaherty.
,, Eaton.
Rev. J. Worsley.

Leeds (The University):
Prof. J. Welton.

Lincoln:
Miss Elwell.
Rev. Canon Rowe.
Miss Turner.
,, Vaughan.

Liverpool (University):
Mr. J. H. Gettins.

Liverpool (Mount Pleasant):
Miss M. E. Bellord.
,, Winfield.

Liverpool (Edge Hill):
Miss Collins.
,, Cussans.
,, Gaskin.
,, Hale
,, Lowe.
,, Perm.

London (King's College):
Mr. A. A. Cock.
Prof. J. Adamson.

London (Southampton Street, W.C.):
Prof. J. Adams
Miss Epps.

Manchester (The University):
Prof. J. Findlay

Newcastle (Armstrong College):
Miss S. E. S. Richards.
Prof. Mark R. Wright.
Mr. J. M. Forster.
Dr. G. H. Thomson.

New Cross (Goldsmith's College):
Miss F. H. Birley.

Norwich:
Miss A. L. Collard.
,, E. Dixon.
Rev. J. A. Hannah.
Miss I. Weatherhead.

Nottingham (University College):
Prof. A. Henderson.

Oxford (Diocesan College):
Miss Simpson.
,, Walker.

Peterborough:
Mr. H. R. V. Ball.
Rev. T. Ward.

Ripon:
Rev. Canon Garrod.
Miss Goodacre.
,, Mander.
,, Newby.
,, Palin.
,, Waterhouse.

Saffron Walden:
Miss Campbell.
,, Dunlop.
,, Mitchell.
,, Wark.

Salisbury:
Miss Allen
Rev. Dr. Baker.
Miss Forth.
,, Gardiner.
,, Grist.
,, Montgomery.
,, Newman.
Rev. Canon Steward.

Saltley:
Rev. Canon Burbridge.
Mr. S. W. Coombs.
,, W. J. Douglas.
,, H. I. Hobbiss.
,, W. Miles.
,, J. C. Walton.

Sheffield (The University):
Prof. J. A. Green.

Sheffield:
Mrs. Henry.

Stockwell:
Miss Doran.
,, Fisher.
,, Hutchinson.
,, Keary.
,, Liberty.
,, Mackay.
,, Manley.
,, Mavor.
,, Ridgeway.

Swansea:
Miss Grierson.
,, Rodwell.
Mr. D. Salmon.

Tottenham (St. Katherine's College):
Miss Austin.
,, Barnes.
,, Billett.
Rev. W. M. Davidson.
,, Preb. Hobson.
Miss Pallot.

Truro:
The Bishop of St. German's.
Miss Beavan.
,, Cooper.
,, Gee.
,, Peat.

Warrington:
Miss Bell.
,, Blyth.
,, Earlam.
,, Ferriman.
,, Frodsham.

Warrington—continued.
Miss Hackett.
,, Hilton.
Rev. H. A. Lester.
Miss Perry.
Rev. Canon Stevenson.
Miss Timewell.

Westminster:
Mr. A. Barriball.
Dr. Dunstan.
Rev. Dr. Workman.

Winchester:
Mr. A. Davis.
Rev. Canon Martin.
Mr. H. W. Padwick.
Rev. R. A. Thomas.
Mr. G. H. Turley.

Wood Green (Home and Colonial College):
Miss Drury.
,, Macken.
,, Pepper.
Rev. H. Searle.
Miss Stairmand.
Rev. D. J. Thomas.
Miss Wilkins.
,, Wood.
,, Wright.
,, Young.

York:
Mr. W. T. Phipps.
Rev. E. E. Nottingham.

THE FOUNDING OF THE ASSOCIATION.

Like many other important bodies the Training College Association had very small beginnings. Before its establishment in 1892 the various Colleges scattered up and down the country were isolated units having no cohesion amongst themselves. The Department, as the Board of Education was then called, was always willing to listen to representations made to it, but there was no organized body entitled to speak on behalf of the Colleges as a whole. As a result, changes were frequently made

under which the different Colleges had to work. There was no opportunity for the members of the staffs of the different Colleges to meet together in social intercourse and to discuss matters of common interest.

With the object of establishing a closer bond of union between those who were engaged in similar work and had so much in common, a letter was written to the educational papers by Mr. W. B. Hards, then a member of the staff of the Battersea Training College, asking for communications from those who were willing to co-operate. The appeal that was first made was to those "other than Principals" in the different Colleges, and a very ready response was made. A meeting was held at Battersea of a few representatives of the Metropolitan Colleges. The idea of forming some kind of organization was taken up warmly and its success was assured from the first.

After a preliminary meeting or two it was wisely decided, as events have fully proved, that there were wider interests involved than those which concerned only the subordinate staff of the Colleges, and as a consequence an appeal for support was made to the Principals of the Colleges also. It should be said that from the very beginning several of the Principals had been consulted and they gave their warmest support even to the more restricted scheme.

THE PRESIDENT'S ADDRESS.

The particular problem before this Association is the training of teachers during a College course, but the issue of the "General Report on the instruction and training of pupil teachers 1903–1907, with historical introduction" suggests that the consideration of the supply and preparation of candidates will be of interest. The report is a valuable contribution and deserves careful study; it is not satisfying, the bias of the writer in favour of the bursar system is too obvious, and the pupil teacher system in its various modifications does not receive either sympathetic or generous treatment; the references that we expect in a blue book are absent and it is therefore difficult to assess the values of the opinions quoted; the history of the pupil teacher system has yet to be written. The report is the plea of a counsel for the prosecution, not the summing up of a judge. Full of defects and limitations the old system for more than half a century supplied English schools with teachers, and it is for the succeeding years to settle whether the Bursar plan, more liberal in its proposed intellectual equipment and necessarily involving a delay in the beginning of practical work, will compensate for the characteristic masterfulness and capacity in the management of large classes, that is so frequently seen among pupil teachers.

The estimate in the report as regards supply will need revising; shortly, the adult teachers during 1905-6 numbered 116,200, it is calculated that this number in 1908-9 will be 131,800; that is an average annual increase of 4·3 per cent. is assumed, of this percentage 0·7 is due to increase in population and 3·6 per cent. represents increase due to the better staffing in schools that began when the Act of 1902 was put in force. I shall be pleased if my conclusions are proved to be wrong, but my investigations show that the special increase in numbers due to improvements in the staff stopped in 1905-6. From the returns I have been able to examine I find that in 1906-7 the rise was slight, in some cases there was even a decrease. The Education Authorities have, it appears, nearly completed their

some difficulty in obtaining appointments.* If the annual increase be 2·5 instead of 4·3 the number in 1908-9 will be 6,600 less than the estimate in the report, and, consequently, the number that should begin as pupil teachers in 1908, say, will be materially smaller than the 21,000 approximately indicated in the report. Further, it will be a great disappointment if the rise of the bursar system, and the improved condition of pupil teachers does not materially reduce the extraordinary wastage due to incompetency in the examination for the preliminary examination for the certificate. I believe that some local authorities recognize that they cannot absorb their pupil teachers at the completion of their apprenticeship, or at the end of their college course, there is, therefore, a tendency to diminish in some districts the number. The report wisely points out that a large increase is needed (1) to diminish the size of classes (2) to increase the proportion of trained teachers (3) to diminish the number of supplementary teachers. If the Board of Education possessed powers to enforce these claims all would be well, but surely it is notable that with the rise of large education authorities, the power of the Board of Education for healthy coercion has been materially diminished. It is difficult to obtain increased local contributions towards education, and it seems inevitable, that if the three necessary improvements mentioned above are to take place, the Treasury must find the greater part of the money. It did not produce a feeling of confidence to find that the proposals in last year's Code to increase the number of certificated teachers in certain schools, disappeared from the Code of this year.

I conclude, therefore, that while we must endeavour to increase the supply of teachers, this problem must be faced after all parts of the question have been considered, we must shun tendencies to exaggeration, and above all we must avoid the danger of tempting young people to enter upon the work of teaching, to find that at the end of the training there is no employment possible as certificated teachers; this danger will arise if we began yearly, with anything like the number indicated in the report.

We all agree however with the report in the necessity there is for a reduction in the size of classes, no noteworthy progress is possible until this essential improvement is made. The Act of 1902 has not specially affected the question, the numbers, I know, work out better, but the improvement has been as a rule in country schools, the impossible unwieldy classes remain as before in town schools. The problem is difficult, it means not only increased annual expenditure for teachers, but also large capital expenditure to provide accommodation.

A reasonable system of education involves that the majority of teachers shall be trained, there must therefore be a large increase in the number of Training Colleges. I regret that they are rising in a sporadic way, due more to the importunity of certain education authorities and sects, rather than to the needs of the country has a whole. It was an error to place the provision of Training Colleges on Local Authorities, it was the one piece of work that the Central Authority could have done more efficiently, local contracts with students will be a source of friction, and I do not think it wise to intensify the provincial feeling among elementary teachers.* I can imagine this Association in another twenty years, observing a struggle going on between the Board of Education and local authorites with respect to the management and conduct of Training Colleges, recent regulations for the establishment of Training Colleges will complicate administration.

I do not wish to prejudice the discussion upon the Bursar system, like the pupil teacher system it overvalues intellectual equipment and has little to say either upon health or temperament. More than ever in view of the changes we are introducing into schools, should liking and aptitude be considered. There is a distressing note of weakness in the regulations which state the head teacher is to certify that the proposed Bursar "is not unsuitable to become a teacher"; the despair of the irreducible minimum. The personal qualifications of the bursar, and his aptitude for teaching must have careful and full consideration, unless there is to be a waste of public money.

* Think of our local pride in a child who attends a Sheffield school until 12, is then transferred to a Sheffield Secondary School, becomes a Sheffield pupil teacher, enters the Sheffield Training College, takes a degree at [illegible] to work in a Sheffield school and spends all

As regards health in schools, I trust we are not about to embark upon an experimental stage in which a fetish is to be made of the teaching of "scientific hygiene." Errors in health are not due to lack of knowledge alone, well formed habits and strength of will are important factors, and of knowledge, that which is based upon the so-called-scientific knowledge is not necessarily the most productive. I would rather trust the conduct of a school to the teacher who has the lust for fresh air, who spends his leisure in cycling, golf or other active exercises, than to the student who has gained many certificates in hygiene, and who has lowered his own health in gaining them.

You will have before you important resolutions dealing with the equipment of bursars. At the risk of infringing upon part of the discussion, I wish for a few minutes to deal with the necessity for some tentative practice in teaching, before admission to a Training College. The Bursar system implies a possible "clean slate," but many colleges will not be prepared to accept that condition. The student teacher regulations solve the question, and if all pass through this stage reasonable conditions will be satisfied. To begin instruction in an art like teaching, to young teachers, from whom capacity under the trying conditions of large classes will be demanded in, say, two years, involves a serious waste of time alike on the part of the instructor and the instructed, unless the pupils have had some tentative experience. We have not made that progress in the principles of education that we have looked for, but it is settled that tentative exercises in an art should precede instruction. The age of Bursars must also be considered, and it is a matter of observation that the Bursar type is younger at 17 and 18 than the pupil teacher at the same age; this is not necessarily a disadvantage, the pupil teacher may have developed too early. I consider that it is essential, that some preliminary knowledge of the ways and routine of an Elementary School, and of the ordinary methods of teaching and dealing with a class, should be acquired before the Training College course begins. Bear in mind that the young teacher, when his training is finished, is to be a craftsman. Such a period is also necessary, to

spend further public money upon the Bursar with a view to making him an Elementary Teacher.

To the regret of this Association, the results of the Preliminary Examination for the certificate is apparently to be issued again in alphabetical order. I may discover in the future, a serious-minded and active worker in teaching who believes in the grotesque style in which the list is at present issued; up to the present I have not found the advocate; it remains, and grave injustice is being done. The concession next year, is to be in the direction of giving lists in order of merit to some 80 individual colleges, while declining to issue a list, say, in 10 or 12 groups for the whole of the country. One does not wish to know in such an examination the "distinctions." Obviously the common-sense view is to determine the general condition of the intellectual training and, despite the defects inherent in the plan of adding together marks obtained in individual subjects, in order to obtain a total that will be the basis for classification; it is fairer, it is more easily understood, and it recommends itself to the common sense of the workers. The grosser errors are eliminated by a classification in groups.

Our Association includes by far the greater number of Training Colleges in the country, and if we deal with real questions we shall do service alike to education and to ourselves. I do not think however that our organization is yet perfected, we have been accustomed to confine our deliberations to the amending of regulations in force, it is time we attempted constructive work, the debate this afternoon on the Simplification and Improvement of Training College Curricula is a step in the right direction. We can further do useful scientific work in recording what is being done in our colleges, we are wofully ignorant of the procedure in colleges other than our own, nor is it easy to find out the methods and plans of fellow workers, in fact I know with greater definiteness what is going on in French and German Training Colleges, than I know the practices of the great London and Provincial Colleges. This Association can spread the necessary information. It may mean an increase in subscriptions, but it will intensify the interest and usefulness of the Association. Remember that it is not

always London? a two or three days' meeting at Buxton or Keswick would be a welcome change), they should, however, have a record of the proceedings of the Association. These considerations suggest that a publication limited in character, in which our deliberations could be recorded would be a valuable help to our work. I do not think the scheme at all visionary, and probably a specimen number could be issued by the aid of voluntary contributions. Might I also suggest that colleges near each other should combine and meet to discuss subjects of interest to the staff in general; many of the subjects before us are administrative and attract the serious attention of heads of colleges rather than of the general members, and I fear the lecturers of colleges are in danger of being isolated in their respective districts.* This Association would do a real service if it could bring into being such local meetings.

The great development of colleges that is imminent, the far reaching changes that appear in recent regulations and proposals, indicate that in the next few years this Association will have an important part to play in guiding opinion, the more reason that we should include as many as possible within our pale. It is a time for unity not for separation. The history of the Association made it inevitable, that its work should primarily involve administrative questions, and also that the majority of its members should be representatives of Residential Colleges, it welcomes however the staffs of Day Training Colleges connected with University Colleges, and it will further welcome the members of the new type of Municipal Day Colleges. The Association should include or join with the lecturers and others connected with Training Colleges for Secondary Teachers. Great harm has been done by the cleavage between primary and secondary teachers, many of the reasons for this cleavage do not exist in the case of the staffs of colleges for the training of teachers for primary and secondary schools, and I look forward to an association that will include all types, and that will allow sections with distinctive interests to meet when necessary. Such an association would influence alike educational movements and its members.

TRAINING COLLEGES AND NATIONAL HEALTH

By Sir LAUDER BRUNTON, M.D., D.Sc., LL.D., F.R.C.P., F.R.S.,
Consulting Physician to St. Bartholomew's Hospital.

I feel greatly honoured by being asked to address the Training College Association to-day, because the subject involved, namely, National Health, is one of the very highest importance, and the Training College Association is one of the most powerful agencies in obtaining it. It is said that Dr. Busby, Headmaster of Eton, was accustomed to boast that he was the greatest man in the kingdom, because, said he, "The fathers rule the country, the mothers rule the fathers, the boys rule the mothers, and I rule the boys." There might be a certain amount of exaggeration in his statement, but it, nevertheless, contained a great amount of truth; for the schoolboys of to-day will be the taxpayers, the voters and the legislators of fifteen or twenty years hence. The ideas they hold then will constitute the public opinion which will determine social, religious, and legislative action. Upon the ideas held by them then, will hang the fate of the country, and it is, therefore, of the utmost importance that the training which the school children now have should be of the best possible kind, so that later on they shall think and act aright. It is difficult, then, to measure the influence which teachers can exert upon national thought, national prosperity, and national health.

We are so accustomed to use the word 'health' that we are sometimes apt to overlook the full extent of its meaning, which is that of being whole, free from any crack, flaw, or defect. Health is of the utmost importance to the individual, to the family and to the nation. It is important to the individual because it frees him from discomfort and pain, it enables him to work and to enjoy life and prevents the depression, sorrow or misery which inability either to work or play is sure to entail. It is important to the family because it prevents the sadness or sorrow that a sick member causes to the rest. It prevents the anxiety which a diminished income and increased expense consequent upon illness, is apt to

nation because lack of health means less work and, consequently, less income to the country, and along with this there is increased expense, some of which is met by voluntary aid, as in hospitals, and some of which is levied by compulsory rates to provide workhouses for those who are unable to work for wage, or for premature paupers. Want of health weakens the country by lessening the numbers of those who are able to defend it, and in this regard we see the importance of the old meaning of the word 'health,' because a very large number of would-be recruits are rejected, not on account of their suffering from active disease, but because they are not sound, not whole in respect of their teeth or eyesight. More than this, want of wholeness swells the numbers of the criminal classes who prey upon the more respectable members of society. On a visit to Broadmoor, Surgeon General Evatt found that a very large proportion of the inmates had become criminals, because they had been rejected from the Army for the defects above mentioned, and having no other means of support were obliged to turn to crime for a livelihood.

The question of how to prevent these evils has been for some time past engaging the attention of the country, and there is a general consensus of opinion, that the first step in the right direction is proper care of the health of children. A few months ago a Bill was passed to provide for the medical inspection of children when they enter school, and at such other times as might seem necessary. Medical inspection is the keystone of all schemes for improving the physique of the nation, for until the deficiencies in children have been discovered, it is impossibe to correct them, and well-meant endeavours to increase the strength of children by physical training without medical inspection, are quite likely to do more harm than good.

Within the last few weeks an excellent memorandum on the subject of medical inspection has been issued by the Board of Education. This memorandum may not meet with universal assent to all its details, but it is in the main very good and I wish to quote here one passage the truth of which I think no one will question.

"The Board are convinced that the work of medical inspection cannot be properly accomplished by medical men without assistance. The teacher, ultimately upon the cordial sympathy and assistance of teachers. Some authorities will find that the teachers are able to undertake without undue strain a share of the work of furnishing data respecting each child, and even perhaps to carry out some portion of the inspection, and it is clear that the successful application of the principles of hygiene to school life will depend almost entirely upon their efforts. What the mother is in the home, the teacher is in the school."

But it is clear that in order to render such assistance in the work of medical inspection, as the Board of Education here contemplates, the teachers must have a certain knowledge of the conditions of health and of the indications of illness.

On turning to the regulations for the training of teachers in Training Colleges, we find notices of what the Board of Education desires. The two years' student must study elementary science including hygiene and the principles of teaching including the care of children. The third year students must of necessity have gone through this course, and a one year student must have a knowledge of the subjects. The kind of knowledge required is to be found in Appendix C. of the Regulations. No scheme of elementary science is as yet prescribed by the Board, but the kind of knowledge of hygiene is indicated in the Syllabus for the Principles of Teaching. There we find that teachers are to study the physical health and physique of the scholars, and the means of maintaining it, the signs of distress and fatigue, physical or mental, the methods of detecting and dealing with physically and mentally defective children and the use of games as physical training. Teachers will readily be able to give assistance of the most valuable kind in medical inspection, by noting amongst the children their size as compared with their age, their shape, whether straight, crooked or bent, their condition of plumpness or emaciation, their colour, sallow, pale or rosy, their cleanliness and their clothing, which indicates the nature of their homes, the persistently open mouth, which is an evidence of adenoids, the frown which is often associated with headache, the screwed up eyes which accompanies short sight, the movements of chorea and the condition of the teeth. All these things will be obvious at a glance, but in the course of the classes, the teacher will notice whether the child is alert or stupid, and it is to be remembered that apparent stupidity is

explanation which the teacher gives, or does not see the diagram on a board or even the print of its lesson book. In play, the teachers will notice whether a child is short of breath or whether it is quite unable to run about like its fellows, or whether it may seem simply lazy, and it is to be remembered that laziness in a child is an unnatural thing and may very likely be the indication of serious disease. I have known of a child being regarded by its parents, its brothers and sisters as lazy and cross, and for these supposed faults the poor child was punished, but when taken to a doctor it was found to have serious heart disease which rendered it incapable of playing like the others, and irritable when they pressed it to join in their games. It is quite possible that I may be mistaken, but I think that the measurements of children, at least their height and weight, could be perfectly well taken by two or three of their fellow pupils. In some respects children are much more accurate than grown-up people. Many of you know the catch questions:—Who was the first man? Adam. Who was the first woman? Eve. Who killed Cain? Many a grown up person will answer Abel, but you will rarely or never find a child tripping. It almost invariably detects the catch and replies that nobody killed Cain.

In addition to noting the condition of the child, as a preparation for medical inspection on its entrance to school, the teacher must learn to observe alterations in the child's conditions during school life, such as the aggravation of any of the defects already noted and the occurrence of inattention, listlessness, languor, apparent inattention or irritability; the occurrence of stooping or of awkward positions, or the onset even of a slight cough, for all these may indicate the insidious approach of serious disease.

In addition to the help which the teachers can give to medical officers in inspecting, and the assistance they may afford in preparing an anthropometric survey, one of the most important duties is to teach the laws of health to the children themslves, because it is the ignorance and apathy of people which form one of the most serious hindrances to the improvement in health and physique of the nation. How are these laws of health to be taught? There are two methods of teaching hygiene;

affording good mental training and so useful as a means of education, but not having, as far as the child can see any bearing on its daily life.

The other way is to awaken the child's interest; to ask it why it feels warm; to show it that something burns inside just as in a locomotive, that instead of iron wheels its movements are carried on by muscles and bones. To teach it how these are made to act together in standing up or in playing cricket, to teach it the nature of food which supplies fuel and materials for repair. To teach it how the food is made available for the uses of its body, and carried to the part by the blood; while air enters the lungs and maintains the temperature and power, just as the draught which goes into the furnace of a locomotive. But even when taught in this way, by engaging the child's attention and leading it to ask questions before any answer is given to them, to make the child wish to learn instead of cramming it with dry facts, the teaching is, nevertheless, apt to be ineffective unless it is accompanied by a demonstration.

Many years ago I attended a course of chemical lectures given by the late Lord Playfair, and amongst the few parts of them that have remained firmly fixed in my memory is my recollection of his demonstration, not merely of his statement, that you can generally tell from the way in which a man washes his hands, whether he has been born in a part of the country where the water is hard or soft. For the man is apt to retain the habits of the child, and if the water is soft, he washes his hands with soap in the water in the basin. If the water is hard, he dips his hands into it repeatedly and washes his hands with the soap out of the basin, only using the water to remove all traces of the soap. This fact being once fixed in my mind the explanation has always remained attached to it, namely, that soft water dissolved soap without forming any precipitate, but that the lime in hard water forms an insoluble lime soap, which will not wash the hands and one is obliged to rub the soap outside the basin. If one looks into it afterwards one sees a thick curdy disagreeable-looking scum, which is the lime soap formed by the hard water. Such an illustration as this will exemplify the kind of teaching

answer perfectly for dolly; the child's imagination supplies all that is necessary, and with them the children might be taught how to wash dolly, how to feed dolly, how to care for dolly and how to dress dolly. It seems to me that telling children to sew a piece of calico without any object, is a task better adapted for a prison cell than for a school room, but if the children are taught to cut out and sew clothes for dolly, it becomes a pleasure instead of a pain, and the learning is of the most thorough character.

It would be difficult perhaps, to teach the care of the teeth in a dolly's class, but this is easily done on the child itself. It is hard to say what is the cause of the defective teeth of the present race, but whether it be a cause or merely a coincidence, I think there can be little doubt that teeth are more defective of late years, since the importation of meat from abroad and its more general consumption at home. Fibres of meat are more apt to stick between the teeth than particles of the bread and afford a better nidus for the micro-organisms which lead to decay. A good deal has been said about the use of the tooth brushes amongst children, but it is apparently often forgotten, that the tooth brush only cleanses the back and front surfaces of the teeth, the very parts which are naturally kept clean by the movements of the lips, cheeks and tongue. It is the space between the teeth which the tooth brush does not cleanse, where decay is most apt to begin, and particles of the food lodging between the teeth are much more readily removed by a toothpick than by a tooth brush. But even if the tooth brush were everything that could be desired to prevent dental decay, the expense of it is prohibitive to many poor children. Sixpence for a tooth brush would be equivalent, in many cases, to dinner for a week, and poverty-stricken households cannot afford such a sum. The proper instrument for cleansing the teeth is one which shall be harmless, efficacious, and above all cheap, and such a thing is at hand in every house in the shape of a lucifer match that has been already used. The end of it simply requires to be cut into the shape of a wedge, and this can be employed either for the purpose of scraping the surface of the teeth or for removing particles of food from between.

that, although it does not strictly belong to the purpose of my address, I may perhaps be pardoned for mentioning an easy way in which the pain may often be removed. Toothache is often caused by the secretions in the mouth becoming acid and biting upon an exposed nerve. If they are rendered alkaline, by washing the mouth out with a weak solution of bi-carbonate of soda, the toothache will often disappear instantaneously. The results which may be hoped for from a medical inspection and teaching of the laws of health to the rising generation, are very great indeed. We may hope that infant mortality would be very greatly diminished, that the tubercular affection of the joints will be recognised, while it is yet time, and that the number of cripples will be very greatly reduced; that the physical deterioration will be averted, and that the next generation will grow up stronger and healthier.

I must not conclude without touching upon the question of alcohol, and the instruction to be given to children in reference to its injurious effects. There can be no doubt that the abuse of alcohol is one of the greatest evils in the country, but it seems to me that in teaching children about it, we must be very careful not to overstate the case and to avoid training a child to despise its parents. My own belief is that the craving for alcohol is, in the majority of cases, due to insufficient food, an ill-balanced nervous system, or physical weakness, and if we can teach the next generation how to cook dishes that shall be tasty, as well as nutritious, if we can teach them the conditions of ill-health and how they are to be avoided, and those of health and how they are to be attained, the alcoholic question will, to a great extent settle itself; the country will become more sober and more virtuous as well as more healthy and wealthy.

THE SIMPLIFICATION AND THE STRENGTHENING OF THE CURRICULA.

Some suggestions for changes in the Curriculum for Infant Teachers and Teachers of Junior Classes in Girls' Schools.

By Miss J. M. DUNLOP.

The Curriculum is still too crowded for the healthy growth of our students either as teachers or learners.

Within the next three years we may expect the majority of our students to come to us with a wider and more solid general education, acquired at greater leisure and with fewer interruptions than in the past. Much of the work that we now do in the Colleges in English, History and Geography, Mathematics and Elementary Science will have been done during the Secondary School period. I would, therefore, suggest that the Training College Curriculum should be further curtailed on its academic side and extended on its professional side.

On the academic side every student should select one subject for a more exhaustive and more critical study than is possible at present when so many subjects demand attention. This might be either English Language and Literature or, if the student knows enough English and French, a combined course of English and French Literature or it might be a branch of physical science, or mathematics or indeed a variety of other alternatives, the limiting factors being the student's taste and previous knowledge and the power of the College to supply the teacher. Assuming that there are forty hours in the week for lectures and study together let a third of this, say thirteen hours, be given to the subject selected. The greater part of the time would be spent in independent study in which the student would learn to deal with the matter of her subject, how to work out problems connected with it and how to express their solution in clear and effective written language. The

Such a course pursued steadily for five out of the six terms of the two years should develop the student in the direction in which her capacity is greatest, should give her a feeling of self-confidence, an increased self-respect and a settled interest and habit of thought which would keep her a student in one direction at least after she is immersed in the business of teaching.

A school staffed with teachers, each of whom had an intimate acquaintance with one branch of knowledge, would tackle new problems and keep pace with modern thought on educational questions more readily, would be less afraid to try experiments, more discriminating in carrying them out and better able to deal with its own mistakes.

The remaining two-thirds of the time should be given to the professional side of the Curriculum. This should include a series of lessons and discussions on the matter of every subject commonly taught in the Infant School and the Junior Classes of the Girls' School, with the best ways of presenting it to children. Stories and poems for young children should be collected and compared to find out which are best suited for the different stages of the child's life, and what had better be omitted at one stage and added at another. The art of telling a story in prose and verse should be practised. The legends of history, the lives of great and attractive heroes, the manners and customs of other times and other races, the best sources for this information and for suitable illustration of it should be considered in connexion with early history lessons. A study of the weather, the surface of the earth, and the lives of some plants and animals would be involved in considering the ways in which children may be made interested and accurate observers of nature. Early lessons in Arithmetic and in the elements of Geometry should be worked out, and it would be found helpful if in this connexion time could be found for learning something of the history of Arithmetic. Lessons in Singing and Drawing should be directed, not only to develop the student's power to use voice and pencil but also to determine the best means of developing children's power in these directions. Children's songs should be

The special characteristics of

Various forms of Handwork should be practised that the student may realise what children can be led to shape in sand, clay, wood and weaving material. While each student should learn by use something of what can be done with all these, she might with profit select one to illustrate its possibilities and her own inventiveness more fully.

The History of Education should give the student pictures of school life at different times and in different countries; it should tell us what children learned and how they learned it, the games they played, the sins they committed and the punishments they suffered. It should be chiefly concerned with tracing the development of method applied to the teaching of different branches of knowledge, and it should not omit to tell us the means that have been used to fashion right conduct. It is, for instance, very helpful to follow Pestalozzi from Stanz to Burgdorf, from Burgdorf to Yverdun noting how his methods of teaching and disciplining his pupils were elaborated and modified by experience and change of circumstances, and it is of much more importance to know this than to know that he wanted to "psychologize education."

The characteristics of children, physical and mental, would be studied in connexion with the matter and method of instruction and the practical work in the school, but there should be some special discussion of the results arrived at by modern physiology and psychology.

A course of Hygiene in its relation to life in the class-room, and to children's games and physical exercise would be needed to help the teacher to secure the healthiest conditions for activity.

Teaching exercises such as practice in the arts of questioning, describing, explaining and narrating; the observation and discussion of specimen lessons and the giving of lessons to children should occupy some part of every week that the student may be kept closely in touch with the problems of her profession.

Continuous practice in teaching a class should be left till the last term of the student's course. During this period she should get practice in at least two classes of different age. This would help her to realise differences in mental development and the need for corresponding

The Curriculum and the Technical Training of Women Students in a Residential College in a city or large town.

By Miss S. WALKER.

No one connected with an ordinary elementary training college is satisfied with the technical preparation of the students for their work in the schools, and the time has come when this question should be faced boldly.

Twenty, even ten years ago students came to the training colleges, after an arduous experience as pupil teachers, quite convinced that they knew how to teach but equally certain that, as far as the subject matter of teaching went, they knew little. From their training colleges they hoped to get fairly sound teaching in the ordinary subjects of a secondary school course, and at the same time sufficient practice in class management to prevent them from forgetting the tricks of the profession. Outside classes for the continuation of general education were few and far between, except so called science classes, and an ambitious student felt that, from the training college course, she must get her stock of subject matter. Naturally the theory of teaching, and especially the practice of teaching under those conditions, formed a small part of the work of the training college. The utmost the most enthusiastic lecturer in education could do, was to try and get her students to look at the work of teaching from a somewhat different point of view. The special emphasis placed on subject matter has developed into the policy of preparing the best students for University degrees, and in spite of all possible safe-guarding, in the matter of giving degree students the same amount of school teaching as is given to the ordinary student, the fact remains that such students have not, in a two years' course, minds sufficiently at leisure from their academic work to become thoroughly interested in the preparation for the work in life.

Times are, however, changing rapidly: students need not depend on the training colleges for all the teaching instruction they are likely to get in subjects. Evening classes, on the broadest lines, are being organised by nearly every Education Committee, and a young teacher has every opportunity of continuing her general educa-

the close of her college course, and often on wider

better prepared academically than was the case five or six years ago, and this will be more and more evident during the next six or seven years, for students will be drawn from the pupils of secondary schools who have had the advantage of a high school course of three, four or five years. On the other hand they will have had little or no opportunity of teaching. It is to be expected that they will come into the colleges quite open minded with regard to school work and its possibilities. At any rate they will not have developed habits which have to be eradicated before progress in real educational work can be made. They will be ignorant of the first things in class work, but it ought to be an intelligent ignorance. Obviously such students will need to devote a good deal of time to school work if, at the end of two years, they are to rank as trained teachers. I am not at all sure that, even at the present time we are not getting in our colleges students, who, although they may have passed through a so-called pupil teachership, are quite as ignorant as non-pupil teachers of actual class work, and who must therefore have been wasting precious time somewhere which might have been spent in the school-room as pupils. In other words the problem of the student quite unexperienced in teaching is with us already. This problem has its stimulating aspect.

Meanwhile another change is making itself felt—a vague kind of general dissatisfaction is being expressed on every side with the products of our elementary schools. The public has asked for certain things from the schools, *e.g.*, regular attendance, that children should learn to read fluently if not intelligently, that "boys and girls should exercise a pretty ingenuity in the manipulations of arithmetical symbols," and a quaint kind of deftness in dissecting complex sentences, etc., and now the public is not quite satisfied with what it has asked for. It is beginning vaguely to demand other things such as a race of healthy children possessing resourcefulness and initiative among the least of their virtues. With these more or less vague demands the public acknowledge that teachers must have "greater freedom of choice in the matter of curriculum, and more generous liberty in the field of experiment than they have enjoyed." For such work we want obviously the wisest, most alert, most intelligent race of cultivated men and women

need no longer be mainly secondary schools, they must fit themselves to become a kind of laboratory where economic and educational needs both of the present and the immediate future are analysed and forecasted, and in which men and women are prepared to go into the schools to use all the intelligence and sympathy of which they are capable to develop a new generation morally, physically, and mentally fit.

The problem is a practical one. Training colleges are being given the chance to become training colleges in reality. Preparation for the specific work of teaching is being asked of them. The kind of student entering the college, and the kind of work which will more and more be demanded of the student leaving the college, points to this.

Meanwhile the Board of Education still lays down a considerable curriculum for the students. We are still expected to carry on their general education, and to cover a fairly wide syllabus in each subject. The Board tries to safeguard each subject by emphasising the idea that each tutor in the training college should teach her subject from the point of view of the student's work later in the school. But this cannot be adequately carried out until tutors and students take such work into the schools, and actually experiment with classes of children week by week. Such work needs careful organization and much time. But with syllabuses so full as they are at present this practical side of the work is often neglected.

A compromise between the academic work and the technical training is at present all that can be hoped for, but may we not look forward to better things in the near future. Students need more than ever they did to leave the colleges prepared to grapple with classroom difficulties intelligently. Headmistresses seem to demand more from a young trained teacher fresh from college than was formerly the case. They seem to be given in many schools the most difficult classes, and the work which older and more experienced teachers shirk. Is it fair to label them trained after a period of six weeks' teaching in two years' course? Can we do more in the colleges to fit them for their work?

Would it be possible to devote the first four terms of [illegible] to academic work, with perhaps

to devote the last two terms of their two years' course to definite, practical, and theoretic training in teaching? Syllabuses would have to be shortened somewhat, but it might be remembered that in preparing courses of lessons in English, Arithmetic, Geography, Science, etc., students would be learning all the time, and especially learning how to use books and libraries—they would be students all the time. If the last two terms of a two years' course, *i.e.*, January to July, were given up to training in teaching it would be advisable for the students to be examined in their four terms' academic work in December. If the Board of Education would agree to this—and an adequate examination could be finished in three days—the results of the examination would stand to the student's credit in her final certificate which would be granted after her examination in the theory and practice of teaching at the end of her five months' training.

Colleges in which there were University students as well as ordinary two year students could arrange adequate technical training for *sets* of such students without much difficulty, if it were understood that, in such colleges, students should only be prepared for an Intermediate Arts and Science examination if they are able to sit for it at the end of their first year in college. This is surely reasonable from many points of view, and chiefly because it is a most uneconomical arrangement in an ordinary training college where two year students are taken to allow the time and energies of two or three tutors to be given up to training a few University students when there are numerous colleges and Universities equipped for such work. Then from January to July second year students would be occupied with school observation and practice, say on three full days per week, and with method and discussion classes in college two days per week, and further work in drawing, singing, and some form of hand work on one half-day per week. That is, in these two last terms at college students would be carrying on their professional training on somewhat the same lines as students in the best of the training colleges which prepare for secondary work.

There are innumerable difficulties in the way of such a plan, but the chief ones are surmountable, I think,

students, *i.e.*, 70 in each year:—from January to July 70 of these students would be observing and teaching in schools for at least 2½ days per week, *i.e.*, 35 students would be in certain schools from Monday to Wednesday, and 35 other students from Wednesday to Friday. Ten school departments or even fewer would be sufficient for each set. To lessen the pressure on the school it would be well to have two sets of nine or ten schools so that the students practising from Wednesday to Friday were in a different set of schools from those practising from Monday to Wednesday. In London and other cities it would be necessary to get the interested co-operation of the county and city council officials, but this would not be difficult for they will readily see that the supply of good teachers largely depends on the adequacy of the opportunities for training given to students. Then with regard to head teachers and assistants it is easy to interest them in the work of training teachers. In the first place, it is understood that the schools chosen are those possessing certain excellencies in organization or methods; and in the second place, Headmistresses seem to believe that assistant teachers are put on their mettle by being given the charge of students in training. Again, if students were able to attend the schools every Monday, Tuesday, and Wednesday morning for a period of say, 20 weeks—it would be a good plan to give certain subjects—after adequate time has been spent in observation to the students, and to make them responsible for the subject. The lecturer in the college in these subjects would, as far as possible, supervise such students at work. These subjects could be varied as the weeks go on, *i.e.*, one student who has taught history and geography in Standard II. for ten weeks, might, with advantage, take a course of Nature Study lessons with Standard VI. However, it would be a waste of time to detail in too great degree the possibilities of such a plan, they are obvious to every organizer of practice work. It is sufficient to indicate here that those students who were in school for one term from Monday to Wednesday should be in school during the second term from Wednesday to Friday.

The question of adequate supervision and of the students in schools, and the superintendence of the [illegible] in the college would, I think,

education department, had only to carry on first year students' work they would each be able to devote from one to even three days a week to help in the technical training work. It goes without saying that such lecturers should be women who are not only sufficiently qualified on the academic side, but each of them should have had as varied an experience as possible in actual class work, and should possess a diploma in teaching. We need to do away with that anomaly in a training college—a mistress of method—every lecturer should be a mistress of the method of her own subject. But for a college of 140 students, two people fully qualified to direct, organise, and superintend the technical training of students are necessary. At any rate this is so at present, when infant and girls or mixed school teachers are trained in the same college. Given a general staff of eight or nine people, two of whom are in charge of the training work, and four or five of whom would be able to spend during the training period from one to three days per week in the schools, there would be at least three people each day to supervise the 35 students at work, and often four or five. In this connection another idea might be developed if time permitted, and that is the advisability of allowing two or three enthusiastic old students, who have been fully fledged teachers for four or five years, to return to the colleges to help in the supervision and discusssion work for five months, and to give them opportunities for further study of education with the idea of fitting them for more responsible posts in school work. If the councils, who permitted the college to use their schools to train students in, would staff those schools with the best possible teachers, and give such teachers the position of critic teachers with a slightly higher scale of salary, and more chances of promotion as is done in some cities in America, it would not be difficult for old students to give themselves such advantages as a further short period at their colleges.

The advantages of a five months' training to students would, I think, be invaluable. They would begin their lifework fresh from their training, and they would have had time to face in a more natural and easy way many of the difficulties which almost break the spirit of a student fresh from a training college course. They would have been students all the time, and, especially

At the same time the course will have been too short for them to have adopted stereotyped ways of dealing with children and school problems, and the result would be that a stronger and more intelligent set of young people would be turned into our schools to grapple with the innumerable situations to be found there, and fewer good teachers in embryo would be hopelessly spoiled than one fears is the case at present.

Curriculum of Women Students in Residential Colleges.

By DAVID SALMON.

These hasty notes relate only to the Curriculum of women students in Residential Colleges.

I think that the present Syllabus is good. Compared with the Syllabus of, say, ten years ago, it is excellent, and I would rather see it remain unchanged than see it changed by the introduction of the dozen subjects on the teaching of which we are assured by a dozen sets of enthusiasts that the happiness and prosperity of England and her place among the nations depend. I do not want our students to die of indigestion contracted through eating too many patent digestible foods.

But though I think that the present Syllabus is good I do not claim the distinction of being the only Principal who does not think that he could make it better.

(1) The course in Mathematics (the first two books of Euclid and Algebra to quadratics of one unknown) is sufficient for a minimum, but I find that about half my students have gone through it before admission. To keep them marking time for two years is unjust; to ask them to march on when they know that they shall get no official credit for progress is discouraging.

I do not advocate making a wider course compulsory, but I suggest an extended optional course for those students who are prepared to follow it. A minor distinction might then, perhaps, be given for a pass in the compulsory part, the major distinction being reserved for a pass in the optional part.

(2) I do not want to reduce the time given to Science, but I do want to see that time more profitably employed. Nearly every pupil-teacher spends a couple of years at General Elementary Science; nearly every pupil in a

entering College. To ask her to spend still two more years at it is so absurd that an alternative Syllabus is already allowed for the more advanced students. Why not substitute in the case of all students that Hygiene in which, for the present, salvation most seems to lie?

(3) I should like to see practical Needlework abolished. Most of the girls are good needlewomen when they enter and so do not need further instruction; the further instruction which they get in College is too brief to benefit much those who are not good needlewomen. If the Needlework in the Syllabus of the Preliminary Certificate Examination is not sufficient, add to it, and then let the candidates have done with it. But while I would abolish instruction in Needlework I would retain instruction in the teaching of Needlework.

(4) Reading connotes both studying the meaning underlying the words of an author and pronouncing those words aloud. The first should be under the direction of the teacher of Literature and the second under the direction of the teacher of Elocution. The books most suitable for the first are not necessarily those most suitable for the second. Even if they were they are so many and so long that half of them cannot be properly read in the second sense.

I would suggest that Elocution be made a subject apart. Plays admitting of variety of expression and declamatory poetry could then be substituted for Bacon's Essays, Utopia, the Memoirs of Colonel Hutchinson, the Letters of Dorothy Osborne, Swift's Conduct of the Allies, and Darwin's Voyage of the *Beagle*,—all interesting to the student of Literature but none suitable to the young elocutionist.

It seems to me that the present Syllabus is like a well-stocked library; room for something new can be made only by taking out something old. While therefore we may tolerate or even welcome substitutions we ought to resist additions. Personally I am satisfied with the Literature and the History, and consider the co-ordination of the two excellent; the time given to Education must not, and the time given to the Music can not, be reduced; the Drawing scheme is practical and far superior to the foolish Free-Hand, the useless Practical Geometry and the practically useless Perspective of South Kensington. The changes which I would like to

A Curriculum assuming that the student has received a Secondary School Education.

By T. RAYMONT.

(1) The problem of the Training College Curriculum has always been complicated by the fact that the school education of the students has varied greatly in quality and extent. Unless and until the average student has received a secondary school education, or its approximate equivalent, I do not think there is a strong case for seriously modifying the present Curriculum. But it seems to me that the time ought rapidly to be approaching, and perhaps has almost arrived, when the assumption that the average student has had such an education may justifiably be made It is upon this supposition that the following suggestions are founded.

(2) The question of questions, in my judgment, is the relation of the general and the professional studies. To put the matter more precisely, the time has come for asking to what extent a student in a training college should be pursuing studies of a general character, in the sense that he is engaged upon material with which, as an elementary school teacher, he will not be called upon to deal.

(3) This point is perhaps most aptly illustrated by the case of students who definitely intend to teach in Infant Schools. Are such persons, it may well be asked, *most appropriately* occupied in studying, in considerable detail, the geography of the United States, the history of the Tudor Period, Burke's Speeches, or Milton's *Areopagitica?* Is it not easy to suggest various other ways of spending these short and precious two years, which would tend to make such students more effective contributors to the welfare of small children?

(4) But the problem is not less pressing in the case of those who intend to teach in boys' and girls' schools. Students are too largely occupied in continuing or revising their secondary school studies, and too little occupied in gaining a thorough acquaintance with the theory and practice of teaching the actual matter of the elementary school Curriculum. For example, it is not important that *every* man who intends to teach in an

elementary school. To put the same point in terms of text-books, a training college student is less usefully occupied upon the later chapters of an ordinary treatise on algebra than upon such books as D. E. Smith's *Teaching of Elementary Mathematics*, or Dewey and McLellan's *Psychology of Number*. Studies of the latter kind are now almost crowded out.

Similar remarks apply to other branches. It is not important, for example, that *every* student should make an elaborate study of certain difficult English classics, but every student should make an elaborate study, from the teacher's point of view, of such literature as can be used in the elementary school. It will be found on examination that the fare thus provided would be by no means scanty or illiberal.

The average elementary teacher will never be got to take a highly intelligent interest in reformed methods of teaching until the training colleges have the chance of doing thoroughly such work as I have now illustrated, *i.e.*, until a large portion of the student's time is devoted to the pedagogic treatment of the knowledge which he has acquired at school, and which he will presently have to impart to others.

(5) But, it may be asked, would not a programme conceived on these lines tend to narrow the outlook of the elementary teacher? Even supposing that he comes to college after having passed through a respectable course of secondary instruction, ought he not, for his soul's sake, and indirectly therefore for his profession's sake, to continue his general studies? Most certainly. But you do not attain the result you desire by causing him to distribute his energies impartially over English Language and Literature, History, Geography, Mathematics, Science, and perhaps Languages. He has arrived at the stage when specialisation is necessary to true edification. He should continue his secondary school studies on one, two, or (possibly) three lines, according to his ability, his attainments, and the amount of his previous experience in teaching. And these lines might correspond roughly, let us say, with the present "optional subjects." These are the only general studies which are really appropriate in a training college.

(6) In the case of students preparing for university degrees, the degree courses would take the place of these

complete preparation for a degree, together with adequate attention to professional studies in the sense indicated in (4) above, is too much for a three year course, except in very special cases. The "rush" for degrees in training colleges, of which the Board of Education complains, is the perfectly natural outcome of the present Curriculum, which places all the stress upon general studies, and relegates "theory of teaching" to the position of an ordinary subject, tested by a single paper.

(7) The ultimate solution of all these problems lies, I believe, in giving the teachers in training colleges the same sort of liberty as that enjoyed by university teachers, by teachers in elementary schools, and, to some extent, by teachers in secondary schools. Examinations in which the teacher has no voice whatever, and *detailed* syllabuses prescribed by authority, devised and amended without the slightest reference to the views of the teachers concerned, are an anachronism. It must be admitted, however, that a college does not deserve the degree of self-government here claimed, unless the need thereof be acutely felt. A college which is well content to be under the thumb of the anonymous syllabus-maker and the external examiner had probably best remain there. I should hope, however, that no such college exists. Assuming this, I can conceive only two real difficulties in such a scheme as was hastily thrown out by the Board of Education a few years ago, and as hastily withdrawn. These difficulties are:—(1) That approximate uniformity in the value of the teacher's certificate is necessary, and (2) that an outside authority must co-operate with the staff of a college in the responsible work of examination. The first of the requirements would be sufficiently secured if the Board were to issue a simply stated Curriculum (comparable with that now prescribed for elementary schools in Art. 2 of the Code), leaving the individual colleges to make detailed syllabuses to suit their needs. In the most important sense, indeed, uniformity in the value of the certificate is simply unattainable. Does anyone really imagine that, though the syllabuses and examinations are the same for all, you get the same result from first-rate lecturing, third-rate lecturing, tuition by correspondence, and self-teaching? The second of the above requirements

this end the training colleges should, I think, work for affiliation to the local universities. The further difficulty of expense would have to be faced. But if the Board is relieved of the trouble and expense of conducting examinations, it can surely afford to contribute towards the expense of such examinations as are here referred to.

The Practical Training of Students in the Art of Teaching.

By Rev. R. HUDSON.

Whatever differences in methods of training exist among the various Training Colleges, we all have one object before us, viz., to equip the students in the best way possible for their professional work as teachers: we have all, I conclude, got beyond the miserable parody of an ideal which thinks that the standard of the teachers own intellectual training should be limited by what he expects to have to teach: we believe that the teacher himself should have the widest education which he is capable of assimilating, and that he will be the better teacher in an Elementary School, the more he has been true to himself in the development of his own faculties; but in Training Colleges however complex the work, there can be only one ultimate object of all efforts, the training of practical teachers in the best way possible under the circumstances.

To those who are not intimately acquainted with the actual conditions of life in our Training Colleges, it would not be unnatural to assume that if we all have one common end, it would be easy to formulate common means of arriving at that end: but actually there is no part of the curriculum in which it is more difficult to lay down hard and fast rules than in the arrangements for the actual practice of students in class teaching during residence: the number of schools available; their distance in relation to the position of the college; the previous experience of the students; the relation of the instruction of these students to others, as in the case of a University College; and, perhaps, most important of all, the varied aims and methods of responsible college authorities; all these combine to make the actual practical training of students a matter for special

securing the practical training of the students: training is experimental in character, no country has solved the problem, and I venture to think that it will be a bad day for any country when it reduces training to such a cut and dried system, as to eliminate the individual characteristics, aims, methods, and personality of the teacher responsible for the training.

The first point that occurs to me in which difference of opinion may exist among those who train teachers is the relation between what I will call "experience" and "training": in my opinion experience must always be ahead of training: before the technical work of training can tell, there must be some basis of experience in the student on which to build: lectures about school method, preparation of lessons, &c., to those who have no experience of actual class work, and to those who have no experience of failure, must be wasted. Those responsible for training should be able to assume that a student knows what it is like to stand before a class for so many hours a day from Monday morning to Friday afternoon, and to throw the same interest into the Friday lessons as into the Monday lessons: he should know the difference between dealing with a class on a bright morning when boys and teachers all feel alert; and on a steamy, muggy day, or in a London fog, when the class is dull and sleepy, but the teacher has to be as jolly as ever he was on the brightest morning: a little experience of this kind will go a long way, but it is necessary before training can be of any use.

The experience I refer to is not that of an occasional lesson given in school, or of watching lessons given by class teachers, but the actual experience for three or four weeks at least of the normal work of a teacher during a whole week. The college staff can do very little here, it is waste of valuable weeks of college residence for students to be gaining the experience which could equally well have been gained in any school under the supervision of the Headmaster before admission: it could well take place between Part II. of the Preliminary Certificate Examination and admission in the September following; it would form a fitting summary to the practical training of the pupil teacher, and an introduction to the training in college. Of course an entirely different system could be devised, in which the student

system and that now existing in colleges, are so entirely different in principle, that I do not see how they can effectively work side by side: also it would seem to be bad economy to attempt it.

The distinctive work of the staff of the college for the students should be that of "Training": the six weeks laid down by the Board of Education as the minimum time for school practice should be weeks of distinct training, as distinguished from mere opportunities for gaining experience: for this there must be close touch between the college staff and the student at work: sufficient knowledge of the work of each individual student in school must be obtained by those responsible for training, from personal observation to enable an opinion to be formed as to each student's capacity, temperament, interest, strength or weakness in particular branches of work, and so on: reports from others connected with the schools in which the students practice, whether given verbally or in writing, are of the greatest possible value; but these are no substitute for constant personal observation by those responsible for the training. A system of training requires that there should be a very close touch between tutor and pupil, in regard to the instruction of the tutor and the actual practice of the pupil in teaching a class and in observing the teaching of others: the principles and methods laid down by the lecturer in the lecture room, may, or may not, be the best; but it is essential to the success of any system of training that the lecturer should be constantly in touch with the practice of individual students, so as to enable him to justify his own views from the actual results seen in the class room. It is most important not to cramp individuality in the students, but on the other hand the average student in college has not had sufficient experience to enable him to gain, entirely unaided, any benefit from the advice of many people of conflicting views: visits of observation to hear lessons by experienced teachers may only lead to confusion unless the methods observed can afterwards be discussed with those responsible for the instruction in college: students of wide experience can form their own judgments; but the average student requires help from those of wider experience to enable him to form a useful judgment on what he has seen; in fact he requires help actually in

How then may we best use the six weeks which have to be devoted to school practice? The Board of Education quite rightly lays down that a particular student should be occupied for not less than a week at a time: but we shall probably have different opinions about the way in which to distribute these six weeks of practice among all the students of a college: *e.g.*, is it better to distribute the practice throughout the year, putting a few students into school each week, or to send all the students of a particular year into school at the same time; this often has to be settled by local circumstances, but, when both methods are possible, which is the better? After trying both, I have come to the conclusion that far better work can be done by concentrating the periods of training, than by spreading them out: suppose that the practice is taken in three periods of a fortnight; one fortnight in the first year, and two fortnights in different terms of the second year: during those times practical teaching is in the air; it is the one thing talked about; there are no grumbles from lecturers who have lost a dozen pupils out of a class, or from pupils who grudgingly leave their lectures just at the time when the point most important for them has been reached, but all can throw themselves with freedom and interest into the school work. An additional advantage is that the greater part of the staff can take their share in the supervision of the students during practice.

A second point that the responsible college authorities must decide is the actual amount of teaching to be done by each student during the week: we have to get the maximum of usefulness in the way of training: the quality of each lesson given is more important than the number of the lessons given: at the outside a student can, in my opinion, only teach with profit for half the week. How then should he use the rest of the school hours? not I should say in preparing lessons, that should be done outside school hours; a part of the time will be taken up in legitimate work arising out of lessons given, *e.g.*, marking books, or preparation of apparatus, but the greater part of the time will be spent in observation of lessons by other students, and by the class teachers, of the school buildings, books, material, ornaments, &c., and in getting hints from the Headmaster and assistants; I am sure that we all have found

will be spent in hearing lessons, and I wonder if we all grasp the importance of this in training; under modern conditions, the assistant teacher in a school is shut up in his class room, and hardly ever, after he leaves college, will be able to hear a lesson by another teacher; very few teachers copy the traditional omnibus driver on a holiday, they don't spend their spare time in hearing the lessons of other teachers. I am not quite sure of the reception they would get if they did.

I would further suggest that students should, when possible, make their visits of observation in pairs; more than two will generally overcrowd the class room, but the value of discussion between two students after hearing a lesson together is very great.

If the school is large enough eleven students might attend: at any one time five students would be teaching, and three pairs hearing lessons; or, in a smaller school, there might be three students teaching and two pairs observing; for the greater part of the time it will be possible for a member of the college staff to be present in one or other of the class rooms where students are observing; and he will be able to judge of the accuracy of the observations made and the conclusions formed. Saturday morning forms a convenient opportunity under the above arrangements for discussions about the week's work between groups of students and members of the staff.

In addition to the actual six weeks in school, there will be the usual discussions on educational subjects during each week, criticism lessons, model lessons, &c. In this connection I will only say about the Criticism Lesson: (1) while there seems to have been a great deal too much of it in the past, it is too valuable an opportunity for instruction and discussion to be allowed to drop; (2) provided that space permits, I cannot see why there should be any limit to the number of students present; (3) all discussion about the lesson should take place immediately after the conclusion of the lesson; criticisms offered at once may not be deep, but they are the actual thoughts of the students; criticisms made after an interval are like notes on a chemical experiment written up outside the laboratory.

Lastly, I would urge that no Training College equip-

have a free hand in settling all questions of organization, curriculum and school method; at present this seems beyond our reach, but ultimately we must hope that some solution will be found, and in the training of teachers a normal master without control of a school will be looked upon as impossible as a chemical lecturer without control of a laboratory.

THE DISCUSSION.

Miss ALICE M. JACKSON (Homerton) said: The mental cultivation of students in Training Colleges needs to be more intensive. The students have now to adopt the psychological stand-point, which is new to them, and they need time for reflection. All the subjects which they have previously been studying need now to be looked at from the point of view of the teacher. It would be an advantage if many students could do as Mr. Raymont suggests, and substitute "The Psychology of Number" for a more extended course in mathematics. Some subjects, *e.g.*, geography, are frequently taught on very old-fashioned lines, and it would be well if students could pay special attention to the modern methods of teaching such subjects. Students should have leisure to pursue some kind of hand-work, and they should realise that this is an essential part of a satisfactory curriculum for the primary schools. In the Certificate Examination more stress should be put on the Theory and Practice of Teaching. Specimens of hand-work should be presented by teachers who intend to teach in infant schools, and perhaps also by those who will be engaged in the upper standards. The training colleges should be primarily places for training teachers. With this end in view all students should have some *continuous* practice in handling a class. When they leave college they should be sent for a year into specially approved schools, there to continue their practical training under an efficient head-teacher.

Rev. J. A. HANNAH (Norwich) ventured to refer to their plan of school practice, as nobody else had mentioned such a system. They found advantages and minimising of difficulties in sending half the students of a year into

interest, while the repetition of a fortnight's lectures kept the college work even. He disagreed with a remark in one of the prepared papers as to no limit but space being necessary, regarding numbers at Criticism Lessons. They had found an increase of keenness since adopting a system of smaller groups. Difficulties experienced with head-teachers about school practice had led to the suggestion, that the Board of Education might perhaps more clearly define what was implied in "affording facilities" for students' work.

Professor HENDERSON (Nottingham) said: He wished to strongly support the proposals of Principal Salmon and Vice-Principal Raymont. Seeing that the syllabus in Mathematics for the Preliminary Certificate Examination, is practically the same as that for the Certificate Examination, at any rate for women students, he suggested that well qualified students be allowed to offer the men's syllabus or drop the subject. If the scope of the Theory of Teaching were extended, the teaching of Mathematics could still be included, and such books as "Teaching of Elementary Mathematics" and the "Psychology of Number," mentioned by Mr. Raymont, would answer admirably. Similarly with General Elementary Science, let qualified students either take up one definite science or drop the subject, while again making provision for the pedagogical aspect. As to Needlework he should like to hear an expression of opinion from the Women's Colleges, but it seems a commonsense view that the methods of teaching Needlework should be the essential feature. Mr. Raymont's proposal to limit the number of subjects was very good; the speaker suggested not less than two nor more than three. Concentration was what we want in the Training Colleges, the students have reached an age when they could appreciate and get full advantage from the deeper study of a subject. We were constantly complaining that the curriculum was too crowded. The above plan would both reduce and improve it.

Miss C. FOX (Southampton) suggested the postponement of the period of continuous practice until after the Academic Examination; there would be, of course, a short period of practice in the first year, to give appre-

by the consideration as to whether bursars enter college direct or whether they serve for a year as student teachers. The Wiltshire County Council had determined that all bursars should act for a year as student teachers. The suggestion that a special period for practical teaching, at the end of the two years' course was good, provided that there has been previous instruction in theoretical teaching, a course combined with model lessons, criticism lessons, and discussions.

Rev. H. WESLEY DENNIS (Battersea) sympathised entirely with the general line of Mr. Raymont's paper, and only ventured to add a few comments and suggestions. The reasons why in Battersea he had supported and encouraged University work were:—(*a*) Because it had opened out the horizon of work throughout the college, otherwise cribbed, cabined, and confined by an over-rigid uniformity. (*b*) Because the absence of classification had made it impossible for the good student to gain the position which under the old conditions he strove to achieve, and had taken some of the ambition and consequent spirit from his work. As regards the Board's syllabus he recognised the endeavour to give variety within limits, but earnestly deprecated two noticeable developements of recent years:—(*i.*) The hasty insertion into the curriculum of a demand for teaching the craze of the moment, and then the method of evaluating the work done by the number of hours given, without regard in either case for the possibilities of a college time table. He spoke with some feeling when he said that manual and physical training were both given for some years before the Board issued any mandates, as also some training in hygiene. Thrift, citizenship, and moral instruction were all excellent, but the right method was diet not doses. The speaker lived in daily terror of being told to include Esperanto in his course of studies and Diabolo among his physical exercises, and of having to fill in a form to show the hours given to each respectively. (*ii.*) The slight importance attached to study of the mother tongue and the theory of teaching, as shown by the very inadequate examination tests applied, one paper of three hours in each subject at the end of a continuous two-years' course. He agreed with Mr. Raymont, and

the setting and correcting of papers done entirely by the outside examiners. He wished to see the Examination held by colleges in small groups, the results published in a classified list, and the expenses paid, or at any rate a definite sum given for the purpose by the Board, who would have to approve of all arrangements. He would welcome this as restoring value to the certificate, and as giving an opportunity to students rightly to measure their progress with their fellows of the same and other colleges on equal terms.

All would agree as to the common object of the Training Colleges stated by Mr. Hudson. The speaker felt equally sure that all must agree that you could not and ought not to attempt to lay down a common method. There was no royal road to perfection. For his own part, in spite of the able way in which Mr. Hudson stated his case, he found insuperable objections to the "block" system. He admitted its conveniences: it was a delightful solution to many internal difficulties: it closed the mouth of the grumbler on the staff, but it suggested at once that fatal idea so very prevalent some years back, and horribly infectious if it should come in again, that school practice was something to be "done," and when done "done with."

Again the difficulties of the school: you could not flood a school with students: the moment you did so the conditions of work were unreal and the practice robbed of its best value. There was a great deal to be said for working in pairs, but he did not see that you could expect any department of a school to give you the use of more than two classes at a time. So far, in his own college, apart from the adjoining school (now secondary), where five senior students attended at a time, they now never had more than two students at a time in a Council School who were placed absolutely at the disposal of the Headmaster, and were expected to do the work, as far as possible, under the conditions under which they would work when themselves certificated teachers. They would not find out the real weaknesses by bolstering up students under artificial conditions, but by making them face the work which they would have to do. He laid down no method for others, but he earnestly desired liberty to

teachers with not only sound theoretical knowledge, but also, and far more so, with the power of gripping and holding the class, and of teaching without the terrible consciousness of the presence of the class which confounded and overwhelmed the young and inexperienced teacher.

The other main difficulty in the "block" system to his mind was this:—"Too many cooks spoilt the broth." Not all the members of a staff were equally qualified to advise young teachers; even if they were, "in a multitude of counsellors there was not always wisdom." He would have every member of the staff in touch with the schools, but there should, and must be, some members who specially devoted themselves to this work and guaged the powers of the students, or there will be hopeless confusion.

Mr. W. T. PHIPPS (York) said: There was little time for students to form good teaching *habits*. What was really needed was time for the students to think about the teaching they have done in the practising schools. The curriculum should be lightened, so that weak teachers who were also weak students may afford time to extra practice, and thus learn to teach what they did know. More time and opportunity were needed for visits to various kinds of schools, to infants' department as well as senior departments. Thus students would become accustomed to the atmosphere of an elementary school, and would learn that a department was not an isolated unit, but an organic part of a school.

Rev. S. BLOFELD (Battersea) referred to the aid the proper use of libraries might give to students in the drawing up of schemes and notes of lessons. The curricula might be simplified if students who already had a sound knowledge of certain subjects (*e.g.*, mathematics, science) were allowed to demonstrate their knowledge in the giving of lessons on such subjects. In the theory of teaching greater attention should be paid to the actual history of the subjects, especially as far as it deals with experiments, successes and failures.

Mr. HARVEY WILLIAMS (Bangor) advanced the following opinions in support of Mr. T. Raymont's views, as expressed in § 5-7 of his Short Papers:—

i. That the reduction of the time and energy expended upon general studies, not specifically pursued as a direct

ii. That specialisation in at least one subject of humanistic study was essential for every student of a Training College. Hitherto the opportunities of specialisation afforded by the optional courses of the Board of Education, have been utilized rather to carry the work in a number of subjects to a more advanced stage and so prevent mere marking of time amongst certain of the stronger pupils, than for the express purpose of specialisation. Neither the benefits of an increased *teaching* knowledge of the subjects nor the benefits of real specialisation are in this way secured. The need of specialisation was as urgent in the case of Training Colleges as of the Universities, for the reason that the students passed out into the world to act the part and assume the responsibilities of men, as well as to perform the functions of a teacher. There could be no better provision for the cultivation of independent thinking and sound judgment, than a full and advanced study of a subject such as English Literature or Modern History from the best available sources, whether these be books, or lectures, or at best both.

iii. That affiliation to the local Universities which would secure admission to the Professorial lectures upon the subjects in which a student is specialising, was eminently desirable. There was nothing more beneficial to a young student than to have sat at the feet of a really great University teacher. A personal introduction, so to speak, was thus given him to the great field of learning and to the society of the workers in it, amongst whom he would have otherwise always felt, even though his own reading might have been extensive, the embarrassment of a stranger, and an uncertainty of his position in hierarchy of students, great or small, of any of the large pursuits such as History or English Literature.

iv. That specialisation of the kind indicated above in one or more of the great branches of humanistic study would correct the tendency,—almost certain to appear,—in the direction of a vicious uniformity, if all the general subjects were to be studied with a view mainly to an acquaintance only with such parts of them as was suitable for the purposes of elementary teaching.

The PRESIDENT congratulated the Association upon the excellent discussion, evidently the circulation of the papers before the meeting was justified. The papers and the discussion testified to the anxiety of the Training College to improve the Curricula, especially upon the practical side. He felt it necessary to point out that while everyone had devoted special attention to the strengthening of the Curricula, few faced the necessity for simplification, they must guard themselves against the danger of adding to the practical side unless there was a relief in other directions. The papers and the discussion could not fail to influence studies and practical teaching in Training Colleges.

THE PLACE OF THE HISTORY OF EDUCATION IN THE TRAINING OF TEACHERS.

By Professor J. WELTON.

Considerable scepticism appears to be prevalent among those responsible for the training of teachers for primary schools as to the value of the history of education as an element in such training. That educational theory is of value is agreed, though the meanings attached to the term are strikingly various, as is evidenced by a comparison of the several syllabuses issued by the Board of Education, which apparently mean: "Study something connected with 'Principles of Teaching,' it doesn't much matter what." But even this half-hearted acknowledgment is denied the history of education. It does not appear in syllabuses 1 and 2—those for teachers in senior schools; and in syllabus 3—that for infant school teachers—only as "the history of the kindergarten and later developments." Nor is the case much better when we turn to the more advanced syllabuses for optional subjects. Here, indeed, we read as a heading "The Theory and History of Education," but when we look at the details we find that "History of Education" is a large term for a very little thing: what is to be studied is a small and detailed topic from the history of education—a topic which, standing in isolation from any historical context, can have but little of the historical atmosphere. For infant school teachers, again we have as history "Frœbel's Pedagogy and Autobiography," a subject not only condemned by its narrowness and isolation but open to the further objections which will be urged later against the exclusive use of biography. Nor when we examine the "seven alternative courses" in History do we find the omission remedied. Thus it seems fair to infer that the Board of Education does not consider the history of education a subject worthy the attention of either teachers or students in Training Colleges. And I have not heard that the Training Colleges themselves have directed their efforts to remedying the omission. The inference seems to be that, in this matter, they agree with the Board.

When, however, we turn to the syllabuses in education

integral part of training; and those of the primary training colleges which are connected with the universities enter their students for these examinations instead of for those of the Board of Education.

It would seem, therefore, that, speaking generally, students in university training colleges study the history of education, those in other training colleges do not study it; or, at any rate, are not called upon to do so by the scope of the examination by which the results of their work are tested. We appear, then, to be faced by two alternatives: either (1) the one class of students is spending a considerable part of the time devoted to professional training in a study which is professionally unprofitable, or (2) the other class of students is deprived of a valuable portion of professional equipment. Either conclusion is so much to be deprecated that the decision of the question cannot be regarded as of merely academic interest. It is as a contribution towards reaching such a decision that the following considerations are submitted.

It must at the outset be pointed out that to neglect the historical development of education is to depart from the general tendency of thought in our own day. The nineteenth century has, indeed, been called "the historical century," just as the eighteenth century might be styled that of abstract and *à priori* dogmatism. And the historical movement originating in the last century is continually gathering force. To whatever department of life we turn, we find students more and more acknowledging that a real understanding of the present can be reached only through the study of the past. This was the great service rendered by Darwin to natural science, and the same conception has been increasingly found true in all the human sciences—in politics, in economics, in ethics. As Paulsen well says: "No one will reach a clear and distinct knowledge of the mixed and often confused conceptions and aspirations of our age who does not pursue the great tributaries which form the stream of our moral civilization to their sources."[1] The truth of such a view will scarcely be gainsaid, and to accept it grants the whole case. For education is ancillary to ethics, if by the latter word is meant the science whose "object is to guide us in the proper conduct of life,"[2] and is certainly relative to the

The abstract study of any of the relations of man to man yields by itself a set of empty forms and principles which, when taken as direct guides to action, lead to a narrow and frequently erroneous dogmatism. The formal economics of the earlier part of the nineteenth century, with its abstraction from everything in humanity save the desire to get much and to give little, is an example of the legacy of the eighteenth century with which we are all familiar. In ethics we find the same empty formalism in the rigorism of Kant, with his abstract categorical imperative ignoring all the concrete conditions under which all human actions have to be performed. In a similar way the abstract study of the theory of education yields results mainly formal and *à priori*. Its talk of "the child," and "the child's mental activities"; of the aim of education as "the harmonious development of the child," or as "preparation for complete living"; of "formal steps of instruction" and so on is all mainly in the air, and with many students is apt to remain there. The abstract treatment does not appeal to them, and they make little or no effort to reduce the abstractions put before them to terms of the actual pulsating life of the school-room. Nor is this to be wondered at. Were we in the eighteenth century, such an abstract and *à priori* mode of presenting the theory of education would be all in line with the prevalent mode of thought of the time. But now, as has been said, it is entirely out of harmony with the general way of thinking. More, it is in antagonism to the context of the very teaching which is so given. Do we not insist that the abstract should be reached through the concrete, and that *à priori* dogmatism is of all things is to be avoided? Yet in the abstract method of teaching the theory of education, a set of principles is either deduced *à priori* from general psychology, with a little help, it may be, from ethics and logic, or else the teaching is made "strictly practical"—which means that rules of procedure are laid down dogmatically. No doubt such rules are the outcome of experience, but of experience with which the students are not made familiar. As the students themselves do not gather the rules from their own examination of teaching experience, the formulation by the lecturer is *to them* dogmatic

It results from such training that the very dangerous, though very common, tendency to regard the school as the only place in which education is given, is strengthened. A natural consequence of this point of view is the idea that the school is so self-contained an organism that it can and should determine its work with little or no reference to the life of the community outside its walls. For the most probable result of mere abstract theory is the belief that there is an ideal of education which remains unchanged throughout the ages—an absolutely best training and teaching, to the realisation of which, it is assumed, we are much nearer than our fathers. And the high-priests of this esoteric cult are the teachers, to whom it should, therefore, pertain to determine the studies and methods of the schools. Of course, taken formally enough, we may speak of an ideal education. But directly we begin to deal with the real thing we must give a content to the absolutely empty formal concept, and this content can only be taken from our own modes of thought. Hence such a claim is at the bottom of any cleavage which the age may deplore between the work of the school and the requirements of the community. It means that the academic filling of the formal idea is more or less divergent from that of the community as a whole. It is true that teachers are more or less experts in school work: whether they are specialists in education in the wider and truer sense depends upon the breadth and sanity of outlook by which they see their own efforts in true relation to the one whole complex social, intellectual, spiritual, and material life of their age and country.

It is here that, in my opinion, we find the true function of the history of education in the training of teachers—a function which cannot be otherwise fulfilled. But that it may fulfil this function it must be a real history of education, not something vainly so called. Now, if we ask ourselves what we mean by the education given in a certain community, we are led away from the one-sided individualistic view which abstract theory is so apt to thrust upon us, and we are drawn to the complementary conception that it is the sum of the efforts of the adult community to give to the young that culture and those views of life which are at the time prevalent, and to do this in such a way that the next generation may advance

In the first place the idea of an absolutely best education, independent of time, place, and circumstances, disappears, for it has no content. Life is always real and concrete; training for life, therefore, is always training for a particular kind of life, with particular aims, aspirations, beliefs, thoughts, evaluations of experience, and material surroundings. To be successful the training must be in true relation to all such aspects of life. That a particular kind of training would not fit a boy for twentieth century life in England is no reason for condemning it as unsuited to its purpose in the thirteenth century. Indeed, thought on education has always been relative to the time, whether or no the thinkers have been conscious of the influence or have supposed they were uttering eternal and immutable truths on which time had no influence. Plato, in the *Republic* and the *Laws*, gives us an idealized Greek training; Rousseau, in spite of himself, paints a fantastic product of eighteenth century individualism. All projects for reform have had their root in dissatisfaction with an actually existing concrete state of things. And, as projects of reform have never been wanting—especially in modern times—it is evident that the actual process of education has never yet been altogether successful. A historical study must, then, estimate the success of particular systems and endeavour to distinguish general causes of success or of failure from those which are special and accidental, and thus attain insight into the tendencies of our own day. Of course, the true test of the success or failure of a system of education is one which cannot be applied directly and immediately. It must be sought in the history of the general lives and aims of the generations as they succeed each other. When a nation becomes nobler in thought and deed, then, indeed, it is safe to say that it is nourishing a generally good educational system, no matter how different it may be from that to which we are accustomed, or from our *à priori* conceptions. When, on the contrary, history shows a people decadent in life and thought, its educational system stands condemned. And such condemnation implies that the education had gradually lost touch with the real needs of life. As national character degenerates, family life becomes less real, and, consequently, the foremost of educational instruments loses its efficiency. More and more is thrown on the school, and, under the conditions we are considering, it will be found that the work of the school has become more and

more out of harmony with the actual requirements and demands of life. There is a natural and healthy conservatism in schools and universities which makes them slow to change; but when conservatism becomes stagnation—the holding to a dead tradition of culture which the age is rejecting—then school and university cease to do real educational work. Hence, both family and school failing, the young receive no true education, whatever artificial polish or conventional accomplishment may be imposed on them. A standard example of what is meant is found in the decadent Roman Empire of the fourth and fifth centuries. Study of the history of education, then, brings home to the mind as nothing else can the danger of the *à priori* assumption that school tradition is right, and the need of frequent and earnest thought on the degree to which what is done in school may or may not be really relative to the lives the pupils are living in the present and will be called upon to live in the near future.

Thus, in the next place, the need to understand the real trend of national life is emphasized, and such understanding is impossible unless its roots be traced in the past. One cannot grasp a tendency by examining a cross-section. History will show that despite all the common humanity of men and peoples, the different ages and countries show startling differences in their apprehension of the meaning of life. To put on one side all savage races, the sense of the meaning of life and the relative value of its different aspects, with the consequent estimate of what is best worth doing and best worth learning, has varied largely in Europe as the ages have rolled on. The centre of interest changes with the changes in this common philosophy of life, as we may term it. In the Greek world, it has been forcefully said, the centre of interest was man; in the Middle Ages it was God; in modern times it is the atom. At any rate nothing so marks modern thought as the extent to which it is occupied with the material world. "We may say, I believe, that no age has ever had a clearer idea of its goal and of the road leading to it: the goal is heaven on earth, the road to it, natural science."[1] Yet amid this spread of materialism, especially among young men—shall we say, because of it?—there comes the phenomena of pessimism and of the "immoralism" of Nietzsche, which so exercise the

[1] Paulsen, *op. cit*, p. 142.

minds of German thinkers. But, on the other hand, there is a growing vitality in Christianity and an increasing sense among thinkers of the insufficiency of materialism as either a satisfaction of human cravings or an explanation of the universe. One sign of this is the increasing tendency to pass from the attitude of assured contempt towards the Middle Ages which marked the seventeenth and, still more, the eighteenth centuries to an appreciation of the fact that in those ages elements of life were emphasized which the modern world cannot afford to neglect. A general consideration, therefore, of the trend of present day thought does not prove as conclusively as is often assumed that it is necessarily and predominantly in the direction of a naked materialism essentially antagonistic to spiritualism. That increase of knowledge is held to be mainly increase in knowledge of natural phenomena—so much so that "science" has come to have its present curiously restricted application —is undeniable, but that this means the substitution of a materialistic for a spiritualistic conception of the universe is quite another matter.[1] Now it has been implied in what has already been said that education which is really in touch with life exerts an influence towards the improvement of that life. Life and education mutually determine each other in the onward flow. But to be really in touch with life means to be in touch with the best elements in life. It is, therefore, of the utmost importance that educators should grasp the true trend of national life, and bring the influence of education so to bear that those factors are strengthened which make for increased nobility of life and not merely those which aim at the improvement of the material accessories of life. In the history of education only too many examples are found of the dire results of neglecting the spiritual needs and aims of mankind, and of the disastrous consequences of taking the lower and often more obvious of the prevalent conceptions of life, instead of the highest available at the time, as the goal of educational effort. And the effect of the various factors which make up the trend of modern life is more easily traced in the past—where, to a large extent, each can be studied in partial isolation as the predominant feature of an age—than in the present time when they are presented to us combined in an unexampled complexity.

[1] It may be remarked that the above passage was written before Mr. Balfour gave his Sidgwick Lecture, in which the same point of view is maintained.

The study of the history of education will show, further, the general character of new movements, which, in their essence though not in their form, are usually very old movements. One of the characteristic features of our time is the desire for novelty and assumption that all change is improvement which especially affects the young. Many teachers seem to aim more at doing what seems new than in discovering what is true. No doubt, many of the educational novelties of our day can be tried at once by abstract theory, but few people take the trouble to apply the test, and the conclusions of those who do—especially when adverse—are regarded with suspicion by the empiricist. But when proposed "reforms" are seen to be simply revivals of past educational heresies which have been tried and found wanting, the case is different. It is certainly good for a teacher to have an open mind—but it should frequently be open at both ends. The touching faith shown by many in the superior educational wisdom of our own times, and in the extreme youth of all that is really good and valuable in education, receives a rude shock from the study of the history of education. And this is altogether to the good, for in itself it tends to reduce the anxiety for something new and "up-to-date" which is the characteristic mark of ignorant and excitable empiricism and a pathetic symptom of the continuous disappointment which attends the breathless attempts to keep pace with the changes in "educational" fashion and the kaleidoscopic mutations of "educational" fads. When, for instance, the student finds that the great "modern" doctrine that educational effort should be adapted to the development of the pupil has been a commonplace of educational theory for more than two thousand years, he is more likely to appreciate the relative values of the abstract doctrine and of the modes in which it may be applied, and to enquire of the past to what extent and in what ways such application has been successful or unsuccessful, and in that find the direction in which to seek the answer to some of the problems of the present.

It is evident from what has been said that the history of education I have in mind is one which keeps in close touch with the history of spiritual, intellectual and social life in general. Like every other special department of history, the history of education is abstract in the sense that attention is fixed on one class of phenomena and abstracted from others except in so far as the latter are

nearly connected with the former. But the exception is a most important one. To treat the history of education in isolation from the actual life of the various peoples, to disregard their views and estimates of life, is to lose the essential good I am claiming for its study. The historical treatment must show education as the stream of conscious effort made to train their young by peoples with certain more or less definite ideals and modes of thought and life. In such a treatment the names most familiar to us in what may, perhaps, be called the common English conception of the subject, will often hold but a subordinate place. Probably the current estimation of what is meant by the history of education is due to the fact that the first English book which drew much attention to the subject was Quick's *Educational Reformers*. But this never claimed to be a history of education, and to regard it as one is not unlike taking the *Dictionary of National Biography* as a history of England. Biography holds the same relation to the history of education as to every other department of history. Nor does a chronological arrangement of biographies obliterate the essential differences between the biographical and the historical modes of treatment. Biography is a more or less valuable accessory to history, but in itself it is quite incapable of giving real historical conceptions and of exercising on the mind of the student the cultural effect of true history. This is, indeed, preeminently the case in educational biography. The heroes of political and military history are those who definitely and markedly influenced the trend of events. But often this is not the case with those selected by a modern writer as the "educational reformers" of the past. He is very apt to apply to past writers tests derived from modern conceptions, and hence to select for treatment those in whom he discovers germs of modern ideas, regardless of whether or not the enunciation of those ideas had really influenced the educational practice of the times. The natural result is that frequently those whose names figure most prominently in the modern book were in their own day voices crying in the wilderness. It is, of course, true that the ideas which have attracted our modern writer have found their way into modern educational thought, but often in much later times and through channels entirely indepen-

educational thought and practice. Writers who were disregarded in their own day and for centuries it may be afterwards, when disinterred from the dust of libraries may be found of antiquarian interest, but the practice of regarding the study of their works as that of the history of education is a mistaken one. Even apart from this it seems evident that the works themselves lose the greater part of their meaning when they cannot be interpreted by a knowledge of the real context of life or thought in which they were produced.

Such a treatment of the history of education as is here contemplated demands that the students have at least a general knowledge of the history of Western Europe, especially with reference to the actual lives led by the people. Happily this is becoming less rare than it used to be. More and more, teachers are recognizing that a study of the history of England apart from that of the rest of Christendom cannot give true historical conceptions. Though the syllabuses for Training Colleges set forth by the Board of Education show as yet no trace of the influence of this fuller and more rational view, yet it appears in the Regulations for the Examinations of Pupil Teachers. Thus, it may be hoped, and to some extent expected, that in the future students will, in increasing numbers, have the appropriate system of knowledge into which the history of education fits, and wanting which it is impossible to teach it without continual excursions into general history. But even when students have not gathered this foundation knowledge, as we may call it, by a previous reading of the general history of Europe, I have always found them willing to do their best to repair the deficiency by study of the subject during the vacation preceding the beginning of our course in the history of education. And it must be borne in mind that a *general* knowledge of the subject goes a long way in forming the background on which our pictures of educational history will be drawn. In the course itself much further and fuller knowledge of the spiritual, intellectual, and social condition of the people will be acquired. In discussing their aims in education one is necessarily considering their aims in life.

I claim, therefore, for the study of the history of education so conceived, that it is of value—

(1) as an instrument of liberal culture, bearing surely,

(2) as, consequently, leading to broader views and increased charity and tolerance;

(3) and so reducing the tendency to regard as infallible our own special way of applying principles which we find are no new discovery, but have been in operation in men's minds for centuries and that with the desire to apply them wisely;

(4) and thus throwing light on many practical problems of our own day.

(5) And, above all, as an essential instrument in the attempt to unravel the complex tendencies in modern life, that we may evaluate them, and throw the whole influence of educative effort on the strengthening of those which make for good.

Or, to put my contention in one sentence, I believe that the study of the history of education is the most potent instrument avilable for forming the broad-minded and clear-sighted educator, in lieu of the narrow, pedantic, and self-satisfied teacher.

METHOD IN TEACHING PHONETICS.

By A. W. REED

In the Regulations for Training Colleges, under the heading, "Outline Course on Structure of English Language" we find:—"*The sounds of spoken English and the method of their production simply treated.*"

Four or five years ago, Mr. H. G. Wells* said, "I would repeat here the astonishment that has grown upon me as I have given my mind to these things, that, save for local exceptions, there should be no pressure even upon those who desire to become teachers in our schools or preachers in our pulpits, to attain a qualifying minimum of correct pronunciation." On the other hand Dr. Henry Sweet† says with a weight of authority that cannot be lightly set aside: "Remember that pronunciation is incessantly changing, and that differences of pronunciation between the older and the younger generation are not only *possible*, but inevitable. Remember that language exists only in the individual, and that such a phrase as 'Standard English pronunciation' expresses only an abstraction. Reflect that it is absurd to set up a standard of how English people *ought* to speak, before we know how they actually *do* speak—a knowledge which is still in its infancy, and can only be gained by careful observation of the speech of individuals, the only absolutely reliable observations being those made by a trained individual on himself. Avoid therefore, all dogmatism and hasty generalisations: be cautious in asserting that 'everybody speaks in such a way,' or that 'no educated man pronounces so.' Do not appeal to the authority of an imaginary 'correct' or 'careful' speaker."

Here we have a distinct contradiction to all appearances. The Board of Education and Mr. Wells desire "a qualifying minimum of correct pronunciation," Dr. Sweet urges the student to shun dogmatic statements and merely learn to record facts. A third writer has spoken with much lucidity on this point. Professor Wyld‡ says, "There is a kind of English which is tinged neither with the Northern, nor the Midland, nor the Southern peculiarities of speech, which gives no indication of where the speaker comes from—the form of English which is generally known simply as *good English*.

It is the ambition of all educated persons to acquire this manner of speaking, and this is the form of our language which foreigners wish to learn"

Of course Dr. Sweet differs from the others because he is dealing with Phonetics as a part of the vast science of Philology. He, perhaps, has done more than any living man to advance the study of Phonetics, and his work has almost revolutionised the science of Philology. He is concerned with speech sounds only as phenomena for scientific observation. He is not concerned with problems of teachers and children. A phonetic alphabet to Dr. Sweet is a scientific medium for recording as truly as in a phonograph, the actual speech sounds of this and subsequent generations.

Let us then take for granted that there is, for our purposes, a standard pronunciation. The "King's English," as Skeat calls it, speaking of Chaucer's language, has its descendant to-day in the language of the Court, of the dominant classes, of the learned professions, and, in its purest form, in the language of women of refinement. I am confident that the possession of a "qualifying minimum of correct pronunciation" would render a subtle but real assistance to young teachers, helping them to realize that they are not marked off by personal defects to belong to a lower caste. Our aim then is clear, but what of our method! Phonetics is in the air; every voice specialist, every modern language specialist, our shorthand experts, all have their nostrums. Here then we need the guidance of a man of Dr. Sweet's standing. His work has been devoted to ends that have in them the element of permanency. His methods are safe and his symbols are reliable because they serve a deeper purpose, a more far reaching purpose than ours. He has laid down the elementary principles of Phonetics in his Primer,* and although the book is not suitable, in my opinion, for use as a class book, it cannot fail to be of use to the teacher.

Having thus cleared the ground I have the temerity to suggest a possible course of instruction in Phonetics. First let us recognise that speech sounds are conventional symbols expressing our thoughts and feelings, and that there is a secondary system of symbols, namely, alphabetic writing. We are, therefore, dealing with the primary materials of language. Our terms must be clear.

secondary symbols, a, e, i, o, u, but one of the twenty or so sounds called vowels. Similarly, a consonant is also an *articulate* sound, it is not a letter. Many sounds produced by the organs of speech, as in grunting, whistling, &c., are excluded from the list of speech sounds. They are *inarticulate*, that is, literally, "not furnished with joints." They are isolated, as distinct from the articulate sounds that form the medium of speech.

The number of articulate sounds used in speaking English is about 45. Twenty-one of these are vowels, the rest consonants. Our first aim is to see that our students can produce these twenty-one vowel sounds with ease and denote them by appropriate symbols. Dialects, whether local or social, are almost entirely a matter of vowels, and we know that most of our students have much to correct in regard to them. Here then is a reasonable and useful beginning; let us require of each student the practice and ability necessary to enable him to produce the twenty-one vowels and to denote them by symbols. In many cases the student will attribute to the symbols his own dialectal values. In this case he must use appropriate symbols also for his mispronunciations. He must learn to hear his own pronunciation, dissociating carefully his faulty vowels from their consonantal setting, he must learn similarly to produce the correct vowel, and this must be his own work in the end.

I have already suggested that Sweet's symbols should be used. In the Primer he employs two sets of symbols, one, which to true phoneticians is of supreme value, is based on Bell's "Visible Speech," the symbols denoting with great ingenuity the position of the vocal organs in the production of the sound; the other, the Broad Romic, which I propose to use, is an adaptation of our alphabet.

The vowels are as follows:—

A. *Short Vowels.* The sound in—

1. c*a*t, *A*lfred .....æ
2. p*e*n, br*ea*d .....e
3. b*i*t, k*i*ss i
4. chin*a*, rath*er* ...ə (inverted e)
5. n*o*t, q*ua*ntity ...o
6. p*u*ll, c*oo*k .....u
7. c*u*t, r*u*m.....ɐ (inverted a)

B. *Long Vowels.* The sound in—

C. *Diphthongs.* The sound in—

13. h*ou*se, r*ou*t ...au	18. cl*ear*, t*ier* .....ijə
14. g*o*, s*ow* .....ou	19. c*are*, th*eir*.....eə
15. t*oy*, v*oi*ce .. ...oi	20. p*ure*, skew*er*...iuə
16. g*a*te, r*ai*n .....ei	21. c*ore*, f*our* .....ɔə
17. time, h*ei*ght ...ai	

Sweet's use of inverted letters is disconcerting at first, but it offers obvious advantages for printing. It will be noticed that the letter *a* is not used among the simple vowels at all. It is used historically to denote the old English vowel *a*, which had the value of the Yorkshire *a* in m*a*n. It will be found useful for our purposes in dealing with broad *a* offenders. It will also be seen that long vowels are represented by doubling the corresponding short symbol. No. 10 however has no short correspondent, hence the inverted *c*. The use of *æ* for the vowel in c*a*t, *A*lfred is interesting. It is an old English vowel now obsolete, and not the Latin diphthong. It is the letter that our modern historians have restored in *Ae*lfred *Ae*thelwulf, but as its value was always that of the vowel in c*a*t, the restoration is misleading. It appears also in Cædmon (pronounced Cadmon.)

In the diphthongs it should be remarked that no new symbols appear, and that the first element of the diphthong in every case bears the accent. In actual practice the trouble of the students lies mainly among the diphthongs. They seldom strike the first, the accented element true. Thus a Cockney pronounces the vowels in h*ou*se, g*o*, g*a*te, t*i*me as *eu* instead of *au*, *au* instead of *ou*, *ai* instead of *ei*, and *oi* instead of *ai*. In each case the accented element is wrong, yet he would not mispronounce it as a simple vowel. These symbols however put into his hands a means of liberating himself from his habit.

When the symbols are known, lists of words might be drawn up under each, but careful revision and 'viva' tests are very necessary.

In the consonants the changes are few. The Broad Romic equivalents are :

b as in bee	l as in look	t as in ten
d „ day	m „ man	(th) „ thick
(dh) „ then	n „ no	v „ view
f „ fall	(ng) „ sing	w „ we
g „ go	p „ pay	wh „ why

It will be noticed that c, q, x and y disappear, because they are unnecessary. The symbols in brackets are alternative forms given by Sweet, which I have chosen to facilitate printing. The *j* is the only symbol that offers any difficulty. The phonetic spelling of duke (djuk), beauty (bjuti) however will illustrate its use.

Phonetic transcripts of single words are misleading, because many vowels are modified in continuous speech. Thus *was*, alone, is rendered *wɔz*, but in the phase "He *was* there, it becomes *wəz*; and many final consonants and vowels are elided in continuous speech.

An examination of the following passage by Sweet will make it clear that the phonetic transcript of individual words is insufficient:—

"People used to think the earth was a kind of flat cake, with the sea all round it."

:p ij p l ˈj uw s – t ə :th i ng k –dhi ˈəəth –wəz –ə :k ai n d –ə v ˈf l œ t ˈk e i kˋ, –w i dh –dh ə ˈs ij –ɔl ˈr au n d –i tˋ.

I have put in the marks of stress and intonation, but a brief explanation will show that these need offer no serious difficulty. The marks of stress are placed before the word or, in polysyllables before the accented syllables.

(ˈ) marks a strong stress, (:) marks a medium stress, and (–) marks a weak stress.

These marks may be practised with ordinary spelling until they are familiar.

Thus the sentence, "An Englishman was once travelling in China who couldn't speak Chinese," would be marked:

–An ˈEnglishman –was ˈonce ˈtravelling –in ˈChiná, –who ˈcouldn't :speak : Chinesè.

The marks, (ˊ) for an upward intonation and (ˋ) for a downward are seen in the words *China* and *Chinese*. Two downward marks appear in the first passage.

We have dealt so far wholly with the *acoustic* study of speech sounds, as distinct from the *organic*, "The word "sound" has two meanings. When we talk of the sound *s* we mean (1) the shape of the throat and the position of the tongue, by which it is produced, and (2) the hiss which is the result of sending the breath through the passage thus formed."* To the serious phonetician the

purposes this is not so. Indeed one might be tempted to argue that a knowledge of the organs of speech is not more important than an intimate acquaintance with the structure of the ear.

A "simple description of the shape and position of the organs of speech" accompanied by individual exercises in illustration of these facts is all that is necessary. For instance, the existence of the vocal chords can be felt by passing from a vigorous *f* sound to an equally vigorous *v*. Place your finger lightly on the speaker's larynx, or Adam's apple, while these sounds are being made, and the vibration will be felt in the case of the *voiced v* but not in that of the *unvoiced f*. In this practical manner the difference between *breath* and *voice* is made clear. Similarly the alternate presence and absence of vibration can be felt in passing to and fro between the consonant *f* and the vowel *ə*. Each pair or set of voiced and unvoiced consonants can be similary used: p,(b,m,); th, (dh); s, (z,r,); k, (g); wh, (w,); t, (d,n,); ll, (Welsh) (l). The voiced consonants are bracketed.

The formation of these same consonants in a "whisper" will show that it is the voiced sounds that are affected. It is doubtful, however, whether the student will detect the contraction of the glottis or throat that occurs in whispering voiced sounds.

In singing a deep, resonant note on the vowel *ɔ* (as in *vor*) he will feel the vibration of the chest. If he pass from the *v* sound to *vor* he will notice the resonating capacity of a well-opened mouth. Similarly, in passing from the consonant *m* with closed lips, when the resonance comes from the nose and closed "chambers" of the chest and head, to the deep, open sound of *mor*, the same fact of mouth resonance will become apparent. This phenomenon of the reinforcement of sound may be emphasised by laboratory work; in any case its bearing on the free, easy, and open delivery of the voice, as opposed to a mumbled and strained utterance is of the first importance. In dealing with the organic side of phonetics it is essential that the student should recognise the organic positions and actions in his own case. The whole purpose of the study lies in this practical application.

We have dealt with *voice*, we have seen that the vowels are voiced sounds, and that the consonants are divided into two groups of the voiced and unvoiced. A further consideration of the consonants will show us at what

point in the throat or mouth the audible friction or stoppage of breath occurs which constitutes them, and what are the organs that set up the resistance. This yields us a classification of the consonants based on *Position*, and gives us the terms gutturals, palatals, labials, &c. The difficulty in sounding nasal consonants (m, n, ng,) experienced by a person who has a cold in the head, the *uvula* or nasal valve being inflamed, may be illustrated in the course of this classification. "Badders baketh bad" is a happy illustration of this point that the Board of Education alighted on, in framing a recent set of questions.

Consonants are also classified according to their *form*. The *open* consonants show a constant emission of restricted breath, hissed, buzzed or pressed out, as in s, sh, zh, wh, th, &c. The *stopped* consonants show a complete check followed by a puff or explosion of breath, as in k, t, p, &c. In the *nasal* consonants, the mouth is closed; but the nasal valve (the soft palate or uvula) is lowered and the voiced breath issued through the nose. The *trilled r* stands in a class by itself.

In dealing with the vowels from the organic side, we would emphasise a remark of Sweet's: "As each new position of the tongue produces a new vowel, and as the positions are infinite, it follows that the number of vowel sounds is infinite." Our 21 vowels are therefore only 21 approximations to fixed points. This illustrates well the fact of the essential flux of pronunciation. A gradual and imperceptible change has turned the old English vowel in *s t aa n* into our *s t ou n* (stone), *b r aa d* has become *b r o d* (broad), and *g ou s* has become *g uw s* (goose). It has been said that an Elizabethan gentleman would fail to understand a modern reading of a play of Shakespeare, though, of course, he might be able to read it in his study. There is a constant modification of vowels imperceptibly going on. Now the tongue is the unruly member responsible for this, and he is abetted by the lips. The tongue has two movements, a horizontal and a vertical. The former produces the *back* and the *front* vowels, the latter the *high* and the *low*. The protruded lips produce the further complication of *rounding*. If the vowels in *fraud*, *but*, *sir*, *father*, *man*, *men*, *bit*, *beet*, be dissociated from their consonants and sounded in a whisper in close sequence, the tongue will be found to be the controlling factor in the sound changes. In father and man a widening of the mouth will also be

noticed. If the same course be followed with *not*, *no*, *put*, and *you* the influence of the lips will become apparent.

The ceaseless process of modification of vowels has been one of the causes of the present non-phonetic state of our alphabet. The discovery of printing contributed to the fixing of spelling; the conservatism of compositors and the decay of scribes led to the loss of whatever power of phonetic representation the French influences of the Middle Ages allowed us to retain. To a great extent our Old English spelling was phonetic; Middle English was less so, but still we may say that Chaucer's spelling was mainly phonetic. No great change however has taken place in our spelling since Caxton's time, so that we find our 20th century pronunciation saddled with a 16th century spelling. Small wonder then that we feel the need of some adequate system of phonetic reform and of phonetic training. In conclusion, I would draw the attention of the readers of this paper to the excellent text book, from which I have already quoted, by Professor Wyld of Liverpool University. Mr. Wyld deals most admirably with the questions I have had the honour to consider in this paper.

EXPERIMENT IN EDUCATION.

By Professor J. A. GREEN.

All who are concerned with the Training of Teachers must welcome any movement which aims at a scientific examination of the principles which have hitherto passed as the basis of educational practice. These principles are in the main either an expression of professional tradition, or they are derived more or less legitimately from the sciences of psychology and physiology.

The traditions of a profession are not of course to be lightly set aside. In our case, they embody the successful experience of the best schoolmasters. The history of education is, in part at least, a history of great practitioners whose influence has left a permanent mark on the work of the schools. Sturm and Fröbel may serve as examples. In these as in nearly all other cases, practical success has one fatal drawback from the point of view of progress. It leads to unintelligent imitation. It is inevitably so, simply because we are not in a position to put our finger on some principle of universal validity, which genius has either brought to light, or has applied in a new way. We only know that certain methods were adopted, and that they proved most successful. Eager to achieve similar success, we go and do likewise. We are spared the troublesome task of thinking for ourselves. We are satisfied with methods and devices that others have worked out. So it is that progressive development has actually been checked by successful practice. Sturm's organisation of the classical curriculum paralysed the grammar schools for centuries, and Fröbel's "Gifts and Occupations," the outcome of an effort towards a geometrical revelation of the world, threaten to kill initiative and to hinder firsthand observation of children's ways and children's needs.

Without failing to give practical success all the weight it deserves, it is clearly desirable to encourage fresh enquiry into the facts amongst which we work, and to examine processes, both old and new, in the light of evergrowing knowledge. There are of course many who claim that the process of teaching has already got its scientific bases, and who are even bold enough at times to claim that education is itself a science. To demand the grounds of such a claim is not unfair. Science, the critic says, is either deductive or inductive in its mode of procedure. "You may begin by laying down

certain principles—the postulates, so to speak, of your science, and upon them you may build up a logical system of propositions which command acceptance, if your postulates are admitted." If it is claimed that teaching practice is founded upon anything of this kind, the critic is prepared at any rate to give the science his attention and he turns straightway to its presuppositions.

In a rough way, this may represent the critic's attitude towards the Herbartian and the Fröbelian. Granted the kinetic interpretation of mind activities which characterises Herbartian psychology, he may allow the force of the doctrine of many sided interest and admit its bearing upon the problem of what we are to teach; but if he destroys the foundation, what becomes of the superstructure? We must either put in a new foundation, or allow that which stands upon it, to tumble to pieces.

Similarly as to Fröbel. If the critic accepts his interpretation of the universe, and of man's position in it, he may be led on to all that Fröbel sees in the simplest instinctive acts of infancy and he may consent to systematise nursery play on philosophic lines. But if he does not!—The tyranny of preconceptions is nowhere better seen than in Fröbel's observations of children. Ideas of unity and connectedness completely possess him.

> "All philosophers, who find
> Some favourite system to their mind,
> In every point to make it fit,
> Will force all nature to submit."

The modern teacher's library is full of examples of the truth of Peacock's lines. Witness the contortions of thought and fact to which the principle of "concentration" and the doctrine of the "five formal steps" have led!

Any attempt to build up a science of education on *á priori* principles is subject to this sort of attack, unless those principles are of recognised universal validity—comparable shall we say to the axioms and postulates of Euclidian geometry. We have not yet reached such a position and if education is to justify the claim to be ranked as a science it must adopt another method of procedure.

justify the position. Education is an "applied" science, whatever that may mean. The term seems to be used of any science the ultimate aim of which is synthetic and not analytic. Wherever the investigator is primarily concerned with things as they are, and not as they may be when put under the artificial conditions of a laboratory, he is not dealing with pure science. The distinction seems unnecessary. The attempt to reach scientific purity has produced abstractions like that of the "economic man" with whom perhaps the educator's "average child" may be compared.

There seems, in any case, to be no reason why the "applied" science should not so far assert its independence of the more abstract related sciences as to pursue independent enquiry into things as it knows them. The scientific agriculturalist has long since taken up this attitude in regard to chemistry, and experimented on his own account even under the complex conditions of the farm, making all possible use of the results obtained by the chemist and physicist. Whether we call agriculture a pure or an applied science matters little, so long as the subject has a unity and independence of its own, both of which are given by the point of view from which the facts are regarded. The standpoint of the agriculturalist differs from that of the chemist and he is consequently frequently led to methods of enquiry special to his case.

Considerations of a like nature have led to a similar way of regarding the position of education. If it is to make good its claim to be regarded as a science, it must cease to rely so much upon tradition, and turn its attention from the construction and criticism of *á priori* systems to the facts with which it has to deal. It must investigate them under "field" conditions, and by means of comparative statistics and by experiment it must endeavour to reach principles of universal validity. It must collect its own facts, make its own observations and draw its own conclusions. At the same time it may make use of the analytical investigations of the psychologist whose methods also are at disposal so far as they lend themselves to our purposes. The difference in conditions of work and in aim will necessitate new methods and modification of old ones. The fact

once the unsatisfactory position of a science of education resting wholly upon psychology, and the need for independent investigation adapted to the special problems which confront the teacher.

The idea of a science of education pursuing experimental methods is not of course new. It is at least as old as Kant and Pestalozzi; and the best educational practice of the nineteenth century was content to trace its procedure to the results of the experiments carried on by the latter at Burgdorf. Nobody was more fully aware than Pestalozzi himself of the incompleteness of his work, and he urged the need of experimental schools in which educational research might be carried on. Until recent years nothing came of the idea, except amongst the followers of Herbart and Ziller, who have concerned themselves chiefly with working out curricula in accordance with disputable presuppositions. The school attached to the pedagogical seminary in the University of Jena is standing evidence of Herbartian zeal which commands respect. All honour to its founder Stoy, and to its present director, Professor Rein.

But scientific knowledge has advanced enormously since the days of Pestalozzi, Herbart and Fröbel. In particular, those sciences to which the theory and practice of education is most nearly related have made enormous strides. A new point of view, that of evolution, dominates men's minds. Important and closely related sciences have sprung into being—anthropology, and comparative psychology, whilst psychology itself has developed experimental methods of research.

Education cannot, in the midst of this progress, continue to attach itself to outworn philosophies. It must advance with the march of human thought and take on the scientific habit of mind, which surely means nothing more than the habit of facing facts, however complex and difficult they may be.

The effort to build a science of education upon the basis of experimentally ascertained fact has already received considerable recognition on the continent. It is new in the form which it is now taking, but its sources are various. From time to time special problems have arisen in connection with the school and with social reform which have led to special enquiry and experiment. So far back as the seventies the cry of overpressure in schools led to the study of fatigue and to the many attempts to measure it, of which perhaps Mosso's

ergograph, Griesbach's aesthesiometer, and Kraepelin's number columns are the best known. Although this particular phenomenon is still under investigation, the original inquiry has led to the more general study of mental hygiene in relation to school work.

The presence of abnormally backward children in the ordinary classes of the primary school raised difficulties in the old percentage days more serious perhaps than they would now, in spite of "exception schedules" which must still linger in the minds of many teachers. The necessity of special treatment for these children has made it necessary to study more carefully the nature of intellectual capacity, and to devise means of testing it satisfactorily. As a consequence, children are being graded in many large continental towns on what is called the Mannheim system, an arrangement which recognizes four types of children—normal children of average ability, constituting according to recent returns about 63 or 64 per cent. of the whole; children sufficiently above the average to be fairly classed as clever, making perhaps 23 per cent. of the whole; children markedly below the average but not mentally deficient, making about 13 per cent.; and children mentally deficient, who constitute a small fraction of 1 per cent. The importance of such a classification is too obvious to need further comment.*

A third source of inspiration has come from the mental pathologists who, thanks especially to Charcot and his school† discovered the fundamental differences in modes of ideation amongst their patients. Upon this followed the investigations of the experimental psychologists who have given us tests for visual, auditory, motor, auditory-motor, and other types of children.

Independent research into the nature of memory, the analytical study of the processes of reading and writing, and the disinterested pursuit of child psychology have likewise stimulated pedagogic thought and enquiry. As a last instance of the indirect way in which scepticism in regard to the presuppositions of the practical teacher has been set up one may cite the case of Pestalozzi's "*Anschauungs-Methode.*" The evidence of eye witnesses in law courts suggested a case for enquiry which was extended to children in school. We know now that an appeal to the eye produces very different effects upon

*v. *Der Unterrichts Betrieb in grossen Volksschulkörpern*, Sickinger, 1904.

† V. James, *Psychology* II., 58.

children at various ages, and some investigations have suggested that ocular demonstrations are disturbing in their effects, in some cases at least.*

In this more or less indirect way the smooth pedagogic course has been disturbed, and teachers themselves are becoming anxious to found their practice upon solid foundations of ascertained fact. *Experimentelle Pädagogik* has, in Germany at any rate, found its most ardent supporters amongst the teachers. In Saxony, for example, the Teachers' Union has equipped and is maintaining an institute for experimental research at Leipsic, the home of experimental psychology. Teachers again are the most frequent contributors to Meumann's *Zeitschrift für Experimentelle Pädagogik*, which has now reached its fifth half-yearly volume, and to which I am indebted for many of the facts in this article. The journal made its first appearance under the joint editorship of Dr. Lay, a teacher in the Training College at Karlsruhe, and Professor Meumann, then of Zürich, now of Münster. Dr. Lay had previously published a useful book, *Experimentelle Didaktik. Ihre Grundlegung mit besonderer Rucksicht auf Muskelsinn, Wille und Tat.* A review in the "*Zeitschrift für Psychologie*" (Bd. 43, Heft 4) charged Lay with improper use of other men's work, as a result of which the joint editorship was dissolved, and Meumann alone is now responsible for the *Zeitschrift für Exp. Pädagogik* Lay's painstaking researches into the methods of teaching arithmetic and writing remain however, a monument alike to his ability and zeal in the cause, and the *Experimentelle Didaktik*, is the only attempt that has so far been made to write a text book of the subject.

Under Professor Meumann's distinguished editorship we may look for a long and useful career to his journal. An experimental psychologist of the first rank, he has made the problem of practical education his special sphere. Whilst occupying the chair of philosophy at Zürich, he published the results of various investigations of the greatest importance to teachers. "*Occonomie und Technik des Lernens*," "*Haus und Schularbeit*," "*Die Entstehung der ersten Wortbedeutungen beim Kinde*" are models of method for the pedagogic enquirer. To the journal itself he has contributed articles of great value. In addition to a general introduction to the

* *V. Schuyten "Sur la validité de l'enseignement intuitif primaire Archives de Psychologie, vol. v.*

whole subject, we have "*Intelligenz–Prüfungen an Kinder der Volkschule*," in vol. i., "*Aesthetische Versuche mit Schul Kindern*," in vol. iii., and "*Die Methoden zur Feststellung des Vorstellungs Typus*," in vol. iv.

Meumann's articles represent fairly well the scope of the journal, except that it includes studies of abnormal children and their education. Of questions more immediately connected with procedure I may cite as examples *Visuelle Erinnerungsbilder beim Rechnen*, an interesting study of the influences which visualisation may exert in the arithmetical operations of young children,* *Die Erziehung der Aussage und Anschauung des Kindes*, *Ubung und Gedächtnis*, &c.

To look now outside Germany, we find in Italy a municipality which has had the courage to set up a school of pedagogic research. Milan has its Instituto di Pedagogia, due in the first place to the personal interest and effort of its present director, Dr. Ugo Pizzoli, who established at his own expense a special laboratory for the study of the intellectual and physiological development of children, whilst he was yet a doctor in private practice in Crevalcore. The Italian government interested itself in what he was doing and sent down a special commissioner to report upon it. Before they had time to act upon his favourable opinion, the Municipality of Milan offered to house and promote Dr. Pizzoli's undertaking. The institute publishes a monthly journal, *Bolletino mensile del laboratorio e scuola di pedagogia sperimentale*, and courses of lectures on physiology, anthropology and experimental pedagogy have been organised. Holiday courses are given, at the last of which more than two hundred teachers attended. So far as I have seen the records of work at Milan the enquiry there seems to be specially directed to the detailed examination of the sensory capacities of individual children. The Italian Government has decided to establish six similar laboratories in various parts of the country.

In Belgium, thanks largely to the initiative of Dr. Schuyten, the director of the Paidological Laboratory in Antwerp, great strides have been made towards securing public recognition of the importance of research in this field. The city of Antwerp has set up a laboratory and

* Cp. the chapter on Number Forms in Galton's *Enquiries into Human Faculty.*

given its director freedom to undertake any research he pleases. He has free access to all the schools, a sufficiently liberal annual grant to enable him to purchase such apparatus as he needs from time to time, as well as books and journals relating to his work—a matter of the very first importance, involving however in respect of journals an annual expenditure which English Universities are not usually able to meet.

As a result, Dr. Schuyten may point with pride to a long series of important investigations of great educational interest. I can only indicate their nature by quoting the titles of some of them. (1) "Changes in children's muscular power during the course of the school year." (2) "Aesthesiometric examination of school children during a whole school year." (3) "The development of school children's memory." (4) "School work before and after midday." (5) "How far should we rely on appeals to the eye in teaching small children." These papers are, for the most part, published in the year book of his institute, *Stad Antwerpen; Paedologisch Jaarboek*. It is of course printed in Dutch, but the articles are made more generally accessible by the brief summaries in French which follow them.

Dr. Schuyten lectures on his subject (Paidology) in the recently founded "free" University of Brussels (*Ecole des hautes études*). The authorities of that city have made it a compulsory subject for all students in their Training Colleges, an example which is being followed by two other provinces. In the case of Brussels, the subject is part of the programme for the fourth Training College year, and one hour a week is given to it. A paidological laboratory is attached to the practising school, so that the subject is treated both theoretically and practically.

Considerations of space do not permit of any attempt to describe what is being done in this direction in Buda Pesth, in St. Petersburg and elsewhere. The work of Binet and others in France is too well known to need description here, and the experiments of Professor Dewey, Professor Baldwin, Principal Stanley Hall, and many others remind one that pedagogic enquiry is not limited to European countries. My purpose was, however, confined to setting forth the point of view of

I ought perhaps, in conclusion, to say that the question of the final purpose of education cannot of course be touched by an experimental method. That is determined by ethical, social, and political considerations which vary with the time and the country. An experimental science seeks universal truths. When found, they may serve various practical ends. Scientific research into the problem of teaching aims at reaching such universal truths. Do they exist?

SCHOOLS FOR DEMONSTRATION AND PRACTICE.

By Professor J. J. FINDLAY.

In view of the great interest that is being taken in Practising Schools, the Editor has thought well to print the following extracts from a small volume which is being issued by the Manchester University Press.* There are some seven chapters, all designed to shew how the Fielden Schools, which have been established to serve the needs of the University Training College, are utilized for demonstration and for research. The introduction gives an account of efforts that have been made to induce the Government to put such schools on a special basis for grants, and in a final chapter Professor Findlay discusses the mode in which such schools can best be organised and controlled so as best to serve the needs of students and lecturers in Training Colleges. We print this chapter in full, omitting only some sentences of merely local interest.

It will be observed that Professor Findlay pleads for a distinctive type of school. Another necessary reform is to secure a closer connection between the Training Colleges and the ordinary practising schools; these schools should have better equipment and a better staff, this can only be attained by a special grant. One method does not exclude the other, and in fact most colleges would avail themselves of both systems. It is difficult to understand why such necessary improvements do not obtain the approval of the Board. They would not be costly, and they receive general support from the Training Colleges. Does the religious question again block the way?

"It is not wise to place a Demonstration School immediately under the control of the Governing Body of an institution for Training, although the Governing Body ought to have a final voice in determining the constitution of the school. It is not wise because the school is a society by itself, of a type distinct from that of the College; true, it is called into being for the sake of the College, but the scholars and their parents claim a 'management' adapted to their own requirements.

*The Demonstration School Record No. 1, containing contributions to the Study of Education from the Department of Education in the University, to be published on March 1st by Messrs. Sherratt & Hughes, London, and the University Press, Manchester, price 1s. 6d.

In the case of a University such an arrangement would be still more unwise, since the whole system of University goverment is based on the needs of students who have passed beyond school age: the machinery of Senate, Council and Court is out of place in the control of a school. The experiment has been tried once or twice in England and has been abandoned (*e.g.*, University College School has just recently been cut loose from University College).

"Both the Fielden Upper School and the Primary School were started tentatively, through the efforts of a few subscribers who formed a Committee acting in independence of the University. All that the University was asked to do was to sanction the attendance of students, for the purposes of observation and practice, and to permit the University staff to supervise the teaching given in the schools. This, however, was obviously a temporary arrangement, and was most happily brought to a conclusion by the generous gifts of Mrs. Fielden, of Centre Vale. It is intended to continue both schools, under the general name of 'The Fielden Schools,' the Upper School being in charge of a Headmaster and the Primary School and Kindergarten of a Headmistress. The Bye-Laws show the arrangement at present adopted; subject to any modification which may be approved hereafter by the Trustees, these will serve as a basis for working the schools. The endowments and subscriptions will be administered for the benefit of both. It is not anticipated that these funds will provide all the resources which are required, but the generosity of subscribers has so far enabled the Committees to meet their obligations, and it is anticipated that before long Government will have found a way to assist the work as part of the necessary equipment of a Training College.

"A Trust has been created and in the constitution of the Committee under the Trust, care has been taken to ensure an adequate representation of the various interests involved. While these Demonstration Schools can scarcely be regarded as included within the provision made by the State for public education, it is obvious that they come within a general survey of the resources provided within the area: if these schools were not there the hundred or more scholars whom they receive would require to be educated at the public cost in other schools.

. . . . . .

"We are often asked as to the type of scholars who are received, and it may be answered that while there is no question of excluding any applicants of suitable age and attainments, the fee (1s. to 1s. 6d. per week) practically settles the matter. We need the help which these fees afford, and parents pay without objection, although it is understood that, if any exceptional cases offered where a parent found the fee to be a serious difficulty, the Committee would not let that stand in the way of retaining an industrious scholar. There are a large number of parents in the neighbourhood who are glad of the opportunity of placing their children in a school where the classes are small, where interest is taken in each scholar, and where the plan of tuition, without reaching to the level of a Secondary School with high academic work, goes beyond the programme of the ordinary Elementary School. This group of the population, families of strictly moderate means, in the suburbs of a city tends to be stable; the children are likely to stay with us until their schooling is finished at fifteen; and for our purposes this is an important consideration, since we wish to retain our scholars under observation for several years. Our 'records' will be far more valuable if we can make up an account of the progress of a number of cases from four years to fifteen years of age.

"The staffing of the schools has been considered with great care, The lecturers and demonstrators on the University staff take a great interest in the work, and hence need to take some share in the teaching in order to supervise students or conduct research while supervising students, but they cannot take the place of class teachers. We endeavour to arrange a class-teacher for each class, who does not take that class for every lesson of the school-day, but makes that class his special concern; this ensures that the detailed control of the daily work is not neglected. In schools where so many people, students, demonstrators, visitors, are coming and going, there would be a danger of the children being left out of sight unless provision was made in this way for class-teachers. Outsiders indeed often suppose that children *must* suffer in such a school, and so they would unless the staff were carefully chosen with this end in view. The junior posts are filled either by graduate

studies to greater lengths, or by teachers of some experience who seek the appointments for a similar reason. We are thus able to keep going a succession of advanced students of Education doing work analogous to that pursued by graduate students in other departments of the University or in the Medical School. The University has now recognised the system by supplementing the emolument of two of these teachers, one in each school, in consideration of the fact that they are assisting in the oversight of groups of students who attend the schools for observation and practice.

"It will thus be seen that the scholars of these schools have a great deal of attention devoted to their welfare, and while the work may in one sense be called experimental, it appears, as a matter of daily practice, to be very like that of other schools, except that far more people are engaged in it, and everything which is done is subject to more criticism and revision than is possible under ordinary conditions.

"The Headmaster, the Headmistress and the University Staff are people of wide practical experience in schools; the junior class teachers are younger, but are specially chosen for the promise they have shown in school work. Hence it is not surprising that parents are well satisfied, and regard the Demonstration School as a second home for their children rather than a place of experiment.

"One important problem in administration remains—the relationship in which these and similar schools will stand to the State. There exist in connection with most of the older Training Colleges, schools which have served somewhat the same purpose, but they were established before the days of School Boards and took the character also of Public Elementary Schools, supplying a portion of the provision for compulsory elementary education, and receiving grants of the same character as those dedicated to other Elementary Schools—and, although their origin was due to the special needs of students—they have never been 'recognised' specifically for that purpose; indeed, there is no machinery at present devised by Government in order to make such recognition possible. We have in fact another of those anomalous situations so common in English administration—an institution established and used to suit one set of conditions, but inspected and aided under the guise

best secured by putting the school for Demonstration and Practice in *a category of its own, inspected and aided as part and parcel of the work of the Training College for whose benefit it exists.* The character of the school, the staffing, the number of classes, all depend upon the needs of the students; it is from this point of view, a kind of laboratory or workshop equipment. Hence it has been proposed that instead of giving grants-in-aid, as is usual in other schools, *per capita* of scholars in the school, the grant should be given *per capita* of students-in-training, for the expense of the school will obviously be regulated by the number of students who require to work in it at one time. Such grants would be similar to the grants made until recently for Training College instruction in Science and Art.

"By thus separating the Demonstration School from other State-aided schools, an additional advantage is secured. It will come under the right sort of inspection; its work will be reviewed by those who are in sympathy with its special aims and needs, viz., by the Inspectors of Training Colleges. Such a school must have abundance of freedom in its arrangements, for it exists partly to illustrate new methods and principles for which the ordinary schools are not yet ready. If its detailed arrangements were to be subjected to the rules of local and central authorities which, necessarily, govern any large school system, half the value of the Demonstration School would be lost. Nor need the authorities which render financial support have any fear that this freedom will be abused to the detriment of the children. Even if the experience of a Training College staff could not be trusted, it may be assumed that inspection by Government Inspectors of Training Colleges would suffice to throw light on any dark places. And, as we have remarked, these schools are at all times very much under the public eyes. Training Colleges are the centre of a great deal of inquiry, and visitors constantly come and go; by their very constitution they are compelled to keep up a high standard, for when they fail to do so they throw discredit upon the authorities of the College.

"In proposing, however, to place the Demonstration School under such control, one grave danger may be incurred—the efficiency of the school as a place of real education may be sacrificed to demands for showiness in equipment and in external results. Demonstration Schools in various parts of the world have already

suffered harm from this source: it is supposed that the equipment must be of the most costly and up-to-date kind in order to exhibit to students the 'best model' of what can be accomplished. So far, indeed, has this tendency gone that in two of the most famous institutions for training an expensive and 'classy' model school is provided as an exhibition for public use, and students are almost wholly excluded from working in it; while a humbler school, attended by children in poorer circumstances is provided in order to do the real work of training, *i.e.*, of demonstration by lecturers and practice by students.

"In the opinion of the present writer, this separation is disastrous, and can only be avoided by frankly admitting that the purpose of the Demonstration School is for business and not for show. Certainly such a school needs all the money it can get for proper equipment and apparatus, but it needs money far more to provide a good fund for salaries, so that skilled assistance can be secured without anxiety.

"And this mistaken view, that the Demonstration School should be set up as a model in matters of external equipment, leads to further misunderstanding as regards the use that can be made of other good schools as aids in training. Within reach of every Training College there can usually be found new buildings, equipped with the latest improvements, the pride of the locality which has erected them. In these schools students will gain a part of their experience, and it is a fatal error to attempt to set up the work of a Training College as in any sense a rival to the good work being done by authorities in the neighbourhood. It cannot be too constantly borne in mind by those concerned in the Demonstration Schools that their special function is to afford a workshop for demonstrators and students, with an intimacy and thoroughness that cannot be allowed in the large public schools. And, as a corollary, it is essential for the student to obtain a part of his experience in large public schools, apart from the special conditions of the Training Colleges, so that he may become accustomed to the ordinary conditions and limitations of the teacher's life.

"It seems necessary to enter fully into these points of organisation and control because the problem is comparatively new to those who organise Education, and grave errors may be easily committed unless the ground is carefully surveyed.

"From the standpoint of the public funds the expense would not be great, even if every Training College were equipped with a useful Demonstration School of some 200 scholars. At the time when public opinion recognised the need for proper equipment of laboratories and art rooms, a grant of £3 per student was found enough to meet the demand, and a grant of a similar kind would meet the present case, if some additional help were provided for buildings at the start. Nor would this aid be entirely an additional burden on the public purse, for the children educated at a Demonstration School need to be taught somewhere, and if they were not received in such a school additional accommodation would be required for them in neighbouring schools.

"If, therefore, the Board of Education can once be induced to accept the principle of approving such schools for this one purpose as part and parcel of Training College equipment, there would not appear to be any serious difficulty in adopting a suitable mode of organisation."

REVIEWS.

English High Schools for Girls, by S. A. Burstall. (London: Longmans, Green, & Co.).

This book is an attempt to define generally the scope and work of a Girls' High School, as being the best kind of Secondary Day School for girls. The writer does not fail to recognise the very anomalous character of the word 'secondary,' and the diversity of type it may embrace, and she endeavours to a certain extent to localize different classes of schools, and to show their adaptability to the needs of particular sections of the population. Not unnaturally, however, as may be inferred from the title, it is the High School *par excellence* which is chiefly considered, although much of what is said is applicable to teaching generally. The large High School with its average of 400 to 500 pupils commends itself to the writer's mind; many of the details of practical working set forth are only practicable in a school of such a size with its possibilities of parallel classes and a large staff. It is open to question whether the tendency for pupils from smaller secondary schools to enter the larger school at the late school age of 15 or 16 for a three years' course, is desirable either for the smaller school or for the individual pupil who follows the practice.

An interesting feature of the book is the method in which it traces the development of girls' education in England from its earliest beginnings, and also its employment of constant comparison with other systems obtaining abroad.

Regarded from the point of view of an educational expert or of one familiar with the intricacies of the questions with which it deals, the book at times would seem to enter into almost unnecessary explanations upon a few particulars, but, generally speaking, its clear arrangement and comprehensive treatment, in so far as is possible in a limited space, of all sides of school life, should make it most valuable. Various vexed educational questions are discussed and illustrated by concrete examples from the writer's own experience. Especially interesting are the chapters dealing with the position, tenure and salaries of assistant mistresses; it is gratifying to see that on these most important questions the writer does not hesitate to sympathize warmly with the assistant mistresses' point of view.

In discussing the problem of the specialist system *versus* the class teacher plan various suggestions are offered; it is always difficult to settle how to give a mistress enough work with her own form to enable her to gain that hold over them which is the great essential of all true discipline, and at the

Some of the combinations of subjects suggested seem to make too great demands upon the individual teacher. The book contains valuable chapters on Discipline, Form Management and Social Life in a day school in addition to other subjects too many to enumerate. That section which deals with Education as a preparation for life is most interesting; it contains suggestions as to the possibility of including domestic training in the school course of at least some of the elder girls; some of these plans would not of course meet with universal approval, but they certainly present an endeavour to solve a difficult problem in the education of the modern High School girl.

The book is eminently practical; for a young teacher beginning work in a secondary school, or for a student in training, it should be of great value, and the more experienced teacher anxious to learn more of educational practice will find it most suggestive. It is, moreover. a book that might well be put into the hands of the intending elementary teacher, for there is often considerable ignorance among these students as to the possibilities and advantages of a good secondary school and some tendency to deprecate methods and ideal which are not familiar to them. S. E. S. R.

Studies in Education during the Age of the Renaissance, 1400 to 1600, by W. H. Woodward. (Cambridge University Press).

Pioneers of Modern Education, 1600 to 1700, by Professor J. W. Adamson. (Cambridge University Press).

These works are a sign of the times. Forty years ago Quick wrote: "In the History of Education not only *good* books but *all* books are in German or some other foreign language." The first edition of his "Educational Reformers," though consisting of only five hundred copies, was not exhausted till the price had been reduced from 7s. 6d. to 3s. 6d., and it had been exhausted twenty years before the publishers ventured to recommend a second edition. When the existence of a theory of education was ignored or denied, and belief in the possibility of teaching the art betrayed connection with elementary schools, who was likely to want to learn anything about the history? And yet the history is not only interesting in the study but profitable in the class-room. If Lancaster and Bell, for instance, had known that the monitorial system had often been tried and found wanting they would not have thought it worth introducing again, and still less worth quarrelling about the honour of inventing.

The days when Quick was a voice crying in the wilderness seem remote now. Teaching has become more than a trade whose few dodges are to be picked up by experience, and though publishers do not consider us ready for a cyclopædia

even on the scale of Buisson's (let alone Raumer's or Schmid's) they have given us sufficient books on the history to fill a shelf. These may deal with particular men, with particular movements, or (like the two works under notice) with a particular period.

The Renaissance made so vast a change in men's intellectual interests and the Reformation (with which it is involved in Protestant countries) made so vast a change in men's views of life that corresponding changes were inevitable in schools which train the intellect and prepare for life. Professor Woodward deals with the fifteenth and sixteenth centuries and Professor Adamson with the seventeenth. The centre of gravity of the first is therefore in Italy though he gives a chapter to England, and the centre of gravity of the second is in England though he gives chapters to Comenius, the "Academies," de la Salle, and Francke. Adequate criticism of each book would demand a long article, and space can be made only to say that both authors write as those having authority and not as the compilers. Their industry is equalled only by their learning. Their statements are based not on what somebody else has said but on what they themselves have discovered by diligent examination of the original authorities. If any one interested in education as a humanising process and not as a battle between the sects has not yet read either, he should lose no time in giving himself both pleasure and instruction. D. S.

The Child's Mind: Its Growth and Training, by W. E. Urwick. (London: E. Arnold).

An Introduction to Child Study, by W. B. Drummond. (London: E. Arnold).

Suggestion in Education, by M. W. Keatinge. (London: A. & C. Black).

Of new books dealing with some of the many psychological aspects of education the name is legion. Surely this is a symptom that the charge so often and so glibly brought against teachers that they concern themselves with the matter they teach, but consider little, if at all, the living beings to whom they teach it, is rapidly losing whatever verisimilitude it may ever have had. And, indeed, this charge has never been more than half a truth. Teachers in daily contact with children could not help but get a deeper, or less deep, insight into their minds and characters: how else, indeed, could generations anterior to "our own enlightened age" have succeeded in educating—*i.e.,* in fitting for life—those who should come after them; And it is to be presumed that none will be bold enough to deny that generations of men and women who did their duty in life, who advanced the bounds of knowledge,

and who produced inestimable treasures of literature and art lived before the nineteenth century. And if this be granted then we have the dilemma that either the study of the being to be educated is not essential to giving a good education, or else that such study is not a modern discovery. "Rousseau," says Dr. Drummond (p. 74), "first taught emphatically the doctrine that all education should be based on a study of the being to be educated," and we have frequently heard the same statement made by others. We can only advise those who make such a mistake to read the works of some of the great writers on education from Plato onwards. The force of the contention that it is the duty of all who undertake to educate children to study them in every rational way is not increased by vague—and unfounded—vilification of those who have gone before us.

Now such study is essentially of individuals, and average results are of little avail; indeed, they are positively misleading if they are taken as anything more than abstract unrealities. The true study is continuous and partially unconscious. We grow into knowledge of our children through our daily and hourly contact with them, and when there is true sympathy between teacher and child that knowledge is often very accurate and surprisingly full. Does this argument imply that a study of "psychology" is of no avail? By no means. Such a study is of the utmost value in so far as it makes the half unconscious study inherent in the very life of the class-room a more fully conscious and enlightened study; in so far as it gives knowledge which aids the interpretation of the outward manifestations of the child's inner life; in so far as it helps the teacher to distinguish the abnormal from the normal; above all, in so far as it increases sympathy with child life. This, indeed, should be its most marked result, for, as sympathy is impossible without some understanding, increased understanding should mean increased sympathy. But if once the study of his or her pupils becomes for a teacher mainly a means to the end of drawing out statistical tables, or to that of making minute analyses of the facts of soul life, then we hold that this interest is one antagonistic in essence to the real work of a teacher. This is the point of the objection to the absorption of teachers in minute analytic psychology raised by Professor Munsterberg—a point of which Dr. Drummond appears to miss (pp. 23-24).

The books, then, which seem to us to be of most help to a teacher in this matter are those which fix his attention on mental life as a real concrete process, not those which make minute analyses of abstract aspects of that life. Among such books we should give an honourable place to those of Mr. Urwick and Mr. Keatinge. The former is the more comprehensive in its treatment; the latter, as its title

suggests, confines itself to one topic, but that a most important and somewhat neglected one. Mr. Urwick's chief contribution to clearness of thought is the prominence he gives to the distinction between immediate and final values, and to the fact, "that immediate values cannot be directly taught, whereas final values can." (p. 116). It is, indeed, to confusion between these two that much of the ineffectiveness of teaching is due. With all Mr. Urwick's positions we are not in agreement; but with this, his main thesis, we cordially sympathise. We think he fails to maintain his contention in chapter viii. that Logic does not contribute to the *theory* of education. Indeed, the whole of his own theoretical treatment rests on Logic, and, if the doctrine of method be part of the theory of education, then obviously, Logic, as essentially an analysis of method, is pertinent. To other less important points also we might take exception, but as our object is emphatically to commend the book we will say no more in adverse criticism than to regret that Mr. Urwick has not seen fit to give his readers that indispensable tool for getting the full value out of his book—an Index.

Mr. Keatinge's thesis is that the indirect inculcation of ideas of conduct is much more likely to be effective than direct exhortation. From a consideration of the influence of suggestion in hypnotic states he advances to an analysis of suggestion in ordinary life. Throughout, he shows an intimate knowledge of the English schoolboy, especially the variety to be found in our Public Schools, and of the boy's attitude towards suggestions as to conduct which conflict with his own moral code. To support his thesis Mr. Keatinge gives us a very ingenious analysis of subconscious mental process (pp. 143–7). Did space permit we would quote a number of the good things which are so plentifully strewn throughout Mr. Keatinge's book. As it is we must content ourselves with expressing our conviction that the book is emphatically one of those which every lecturer on education should read and ponder, and which should be put into the hands of our more cultured and thoughtful students.

Dr. Drummond's book has for its purpose the promotion of "Child-Study," by which "is meant the study of children by the methods of modern science." But when one reads his chapter (v.) on "the methods of child-study," one finds little indeed of that rigidity and exactness of method which is of the essence of modern science. As Mr. Keatinge says: (p. 153) "Mind cannot be measured, it can only be valued." With much that is done in America under the name of child-study Dr. Drummond is in very imperfect sympathy, and, indeed, the average Englishman cannot but recoil from the kind of questions so often to be found in "*questionnaires*" hailing from the other side of the Atlantic. Indeed, on the

general question as to direct prying into a child's inmost feelings we are in close agreement with Mr. Urwick's remarks (pp. 209-211); and, of course, our acceptance of Mr. Keatinge's position is quite antagonistic to the use of this method of investigating child life. No doubt there are matters in mental life into which enquiry may be made by experimental methods. Mr. Keatinge records some in his third chapter. But a study of such examples brings out clearly the ambiguity of the results, of which various interpretations are given. It further illustrates the danger that, unintentionally, suggestions may be made to the children experimented upon which are altogether to be deprecated, as, for instance, that the experimenter does not regard the law of truth as at all inviolable. And what amount of scientific accuracy can be expected to mark "the outcome of a *questionnaire* addressed to adults, who were invited to recall their childish fibs or instances of being unjustly accused of falsehood." (Drummond, p. 288)? Do not let us be misunderstood. It is not to rational study of children we object but to the absurdities and exaggerations which attend this movement in the hands of persons whose zeal exceeds their discretion, and who in their hunger for answers to questions do not hesitate to pry into the most sacred and innermost sanctuaries of the soul. As we have indicated, Dr. Drummond does not altogether approve these extremes: unfortunately, as we cannot but think, he does not explicitly condemn them.

When we turn from this question to the contents of the book before us we find much that we can commend without reserve. Chapters vii. to xiii. which deal chiefly with the observation of the physical nature of the child, and with physical manifestations of fatigue, are excellent. The exposition is a model of lucidity and of selection, and can be unreservedly commended to the attention of serious students of education. The other chapters also contain much that is suggestive and helpful; but, for the reasons we have indicated above, we do not find them as uniformly valuable as those which have a more directly medical reference. J. W.

Every Day Ethics, by Ella L. Cabot. (London: George Bell & Sons.)

This book is a suggestion for the solution of a problem which schools are bound to face before long: namely the practical teaching of the proper conduct of life. The method suggested by Mrs. Cabot is certainly calculated to produce clear thinking and to refine moral standards; yet it does not impose on children rules of conduct which they cannot understand and will not turn them into absurd prigs nor bore them into revolt against the very words goodness and badness. A story or poem having reference to some moral

question is to be read to the children, questions are then set which are to be answered in short essays, and when the teacher has read and marked the essays, the special problem is to be discussed by the class under the teacher's guidance. When all opinions have been heard and considered, the results are to be shortly formulated and written on the blackboard. Each chapter is a discourse indicating roughly the probable course of a lesson. Throughout attention is concentrated on practical problems; illustrations from everyday difficulties of domestic and social action are numerous. The author has obviously been deeply influenced by the methods and conclusions of James. She lays great stress on the importance of a cultivation of insight and clear thinking. She insists on the supreme value of a strong permanent interest in life, normally the career chosen as a means of livelihood, and groups and explains the virtues as means to the complete working out of that interest. A thoroughly intelligent teacher, using critically the method here suggested, might arouse children's interest in problems of conduct, and clarify and deepen their moral ideals. But an uncritical use of the book would lead to total failure. A teacher of practical ethics on this method must be a man of original and independent outlook on life, and yet be capable of winning the complete sympathy of his class. For he must elicit and criticise *their* opinions, not impose his own. Probably the period of education in which this method could be used is limited. Young children have too small an experience of life to enable them to appreciate and discuss problems of conduct. Students of college age should go deeper, for Mrs. Cabot raises no questions concerning ultimate standards. Hedonism and asceticism are not even named; neither the freedom of the will nor the immortality of the soul is discussed. But within certain limits and under the guidance of a skilful teacher, children would by this method come to understand something of the complexity and responsibilities of life, and to realise that goodness is not some mystic quality, to be attained quite apart from the main interests of life, but is simply the way in which each man by fully developing his own nature and at the same time meeting the demands of others upon him, may live his life best. M. A.

Psychology for Teachers, by C. Lloyd Morgan. New Edition, rewritten. (London: Edward Arnold).

A book on this subject, written more than thirteen years ago by a distinguished man of science, stands in no need of lengthy notice in this place. The various chapters have been practically re-written for this edition; the size of the book is increased from 250 to 300 pages; and the old commendatory preface by the late Sir Joshua Fitch, having served its

purpose, disappears. Like the same author's *Comparative Psychology*, the book is written in an extremely interesting way. In this respect, as in others, it will not suffer by comparison with anything that has been written by a psychologist for teachers. T. R.

A Primer of Psychology, by Laura Brackenbury. (London: John Murray).

Every page of this book bears witness to the fact that its author has studied psychology under the best of guidance, and that she knows her subject thoroughly. The point of view adopted is that of Professor James Ward in the well-known *Britannica* article, but the work of Professors Stout and Wm. James has also been drawn upon. The book seems to us as clearly and simply written as is compatible with what appears to have been the writer's aim; in particular, it is to be commended for its frequent and apt illustrations. The late Professor Jevons held that exercises are as necessary in the study of logic as in that of mathematics. Miss Brackenbury "goes one better," apparently holding that exercises are as necessary to the student of psychology as to the student of logic. In our opinion she is entirely justified, and we regard the "Questions and Exercises" at the end of the book as a thoroughly commendable feature. The Glossary is also useful, since psychological terms are often used in very different senses by different writers.

We do not doubt, then, that Miss Brackenbury has done a real service in writing this book. We are not sure, however, that she has done the service that she intended, or that most people would have expected. Let not the unwary lecturer in a training college, for example, be beguiled into adopting this book for class purposes, merely because it is small and apparently manageable, and is called a primer. Frankly, we do not think that the average training college student would make much of it. It is fair to say that the author makes no pretence whatever of writing for that person. At the same time, is not such a student the very person whose needs ought to be met, in this particular subject, by a "primer"? T. R.

A Primer of Logic, by Miss E. E. Constance Jones. (London: John Murray).

This book is a brief sketch of the outline of Logic; it does not claim to be more comprehensive in its treatment of the subject. So far, however, it is very clear and methodical in arrangement, but at times one could wish, if space permitted, for a little more explanation. Possibly the method of treatment, which is chiefly deductive, is such as does not so well lend itself to longer exposition. This is especially the case

in the section which deals with the relation of Logic to knowledge. The question of the scope of Logic might with advantage be summed up once more at the end of the book, and such a problem as appears among the first of the appended sets of questions, *i.e.,* "Discuss the scope of Logic" is too comprehensive for the student who has merely read the first chapter, unless he is simply required to give a reproduction of that chapter. The chapters on Induction and the Inductive Syllogism seem particularly clear and are illustrated by numerous examples.

The book is intended for students, but not especially for those taking Logic as part of the course in Education prescribed for a Teachers' Diploma or for the Government Teachers' Certificate. It is doubtful whether such students require so much formal Logic; the most useful study for them in their preparation for the teaching profession is in the same course embracing the practical application of the principles of Logic to the exigencies of the classroom. As a useful book of reference on more formal points the Primer would be most helpful. S. E. S. R.

The Practice of Instruction, ed. by Professor J. W. Adamson. (London: National Society's Depository).

This book is the latest example of a mode of treating the problems of teaching which has found expression successively in the well known XIII. Essays, and in the works edited by Messrs. Barnett, F. Spencer, and Welton. In all these books we have, within the compass of a single volume of moderate dimensions, first a general treatment of the subject by the editor, and then a series of chapters on various branches of study by specialist contributors. The characteristic feature of the two most recent of these works—those of Professors Welton and Adamson—is the greater adequacy of the introductory part; and the volume before us is still further distinguished by its frequent references to foreign as well as to English pedagogic literature, and by its refusal to ignore the burning topic of religious instruction.

Assuming for the moment the wisdom of the general lines upon which it is constructed, we desire at once to bear emphatic testimony to the general excellence of Professor Adamson's book. His own introductory chapters, extending to one quarter of the book, are, we think, sound and suggestive. They are pervaded by a truly philosophical spirit, without being encumbered by a philosophical terminology which could only embarrass the average student of education. Dr. Headlam of course handles the question of Religious Instruction with a frankly denominational bias, but many of those who differ from him on this point will thank him for his equally frank advocacy of embodying the results of sane

criticism in our Bible lessons. He is, they will think, surely right in holding that to teach as historical fact that which is demonstrably not historical fact, is to sow seed which will in due season bring forth a crop of "religious doubts."

The names of Dr. Herbertson in connection with Geography, of Dr. Percy Nunn and Miss von Wyss in connection with Natural Science and Nature Study, and of Dr. Rouse and Mr. W. H. S. Jones in connection with the teaching of Latin and Greek, sufficiently attest that what is written on these subjects is well worth the attention not only of those who are preparing for the teaching profession, but also of experienced teachers. Miss M. A. Howard deals with the teaching of History; Mr. A. H. Baker provides a useful chapter on the teaching of Mathematics; and Mr. W. Mansfield Poole expounds the reformed method of teaching Modern Languages. To pronounce authoritatively on this mass of varied material is probably beyond the powers of any one person. The present reviewer, at any rate, must desist from the attempt.

And this leads us to make a few closing remarks upon the general scope of the book. Three thoughts have frequently occurred to us whilst we have perused it. First, we have never yet met the person who could read much more than one-half of its contents with real interest and profit. Secondly, some at least of the contributors have, unless we are much mistaken, felt sadly hampered through lack of space. Thirdly, even so, some of the most vital parts of a modern curriculum have not been considered, because, as the editor says, their inclusion would have meant "swelling the bulk of the whole work intolerably." From all which we are driven to the conclusion that the future does not lie with books conceived on the lines of this one, excellent though it is in its way. The cause of sound instruction will, we think, be better served (1) by the sort of book which contains a general treatment, by one hand, of the problems of pedagogic method, comparable with the logician's general account of the problems of scientific method, and (2) by separate treatises on the teaching of the various branches of the curriculum, written by specialists, and giving that amount of detail which alone can make effective appeal to practical teachers. To attempt the whole of this within the limits of a single volume is, we fear, to achieve the proverbial result of trying to sit upon more than one stool at a time. T. R.

The Growth of English, by Professor H. C. Wyld. (London: John Murray).

The aim of this book is to provide material for beginners

Colleges. The distinctive character of the work lies in the method in which the matter is presented, and for that reason it is most helpful and suggestive to both students and teachers. The method is briefly as follows:—By appeal to *his personal observation and experience,* the student is led to realise (*a*) the relation between thought, speech, and written word; (*b*) the classification of sounds according to the use of the vocal organs; (*c*) the influences on sound (1) of other sounds (2) of stress; (*d*) the present day variations in English pronunciation, grammar, vocabulary and idiom, due to differences of interest and occupation, of class, of place, of abode, and of age; (*e*) the position and characteristics of standard English; (*f*) by application of (*c*), the actual changes in present day English speech. This portion of the subject is to be constantly tested and verified by the student by observation of his own speech and the speech of those around him and thus a groundwork is prepared, on which the study of the variations in the history of the language can be based.

The second portion of the book deals with the relation between speaking and writing and the method of discovering the pronunciation of English sounds during any period in the past by the spelling and use of rhyme prevalent at the time: by comparison with dialects and with other languages; and finally by the testimony of contemporary writers. By means of copious examples and quotations sufficient guidance is given to the student to enable him to solve similar questions on his own initiative. Then follows a brief account of the history of the language, and, as before, constant reference is made to the principles laid down in the earlier chapters and frequent examples and illustrations are given.

The concluding chapters treat of such questions as the anomalies of English spelling; the development of vocabulary; inflexion; and finally the place of English among other languages. The author, having realised the difficulties of a beginner in approaching this subject, has overcome these difficulties most effectually. Throughout the book, material and suggestions for personal research are given to the student, which transform what has often been a mere compilation of uninteresting facts, memorised with difficulty, into a living and stimulating study. Incidentally, many valuable hints are given to those who are engaged in teaching spelling, reading and composition in schools.

The value of the book to teachers can be best indicated by quoting the author's own words: "It is my earnest hope that those chapters especially which deal with the varieties in modern English speech may not only prove interesting to

Lessons in Practical Hygiene, by Alice Ravenhill. (Leeds: E. J. Arnold).

School Hygiene, by Dr. Robert Lyster. (London: University Tutorial Press).

One of the most evident changes in educational thought of the present day lies in the growing importance attached to the study of Hygiene. So far, it must be regretted, the change has been more evidenced in theory than in practice. Real Hygiene, in spite of Government Regulations, Training College Curricula, and numerous writings and conferences, is still absent from school practice. The chief difficulty in introducing Hygiene into schools consists in the paucity of knowledge of the subject possessed by the majority of teachers, and until more confidence is gained through a deeper acquaintance there will necessarily be a diffidence on the part of teachers to teach Hygiene otherwise than by occasional reference.

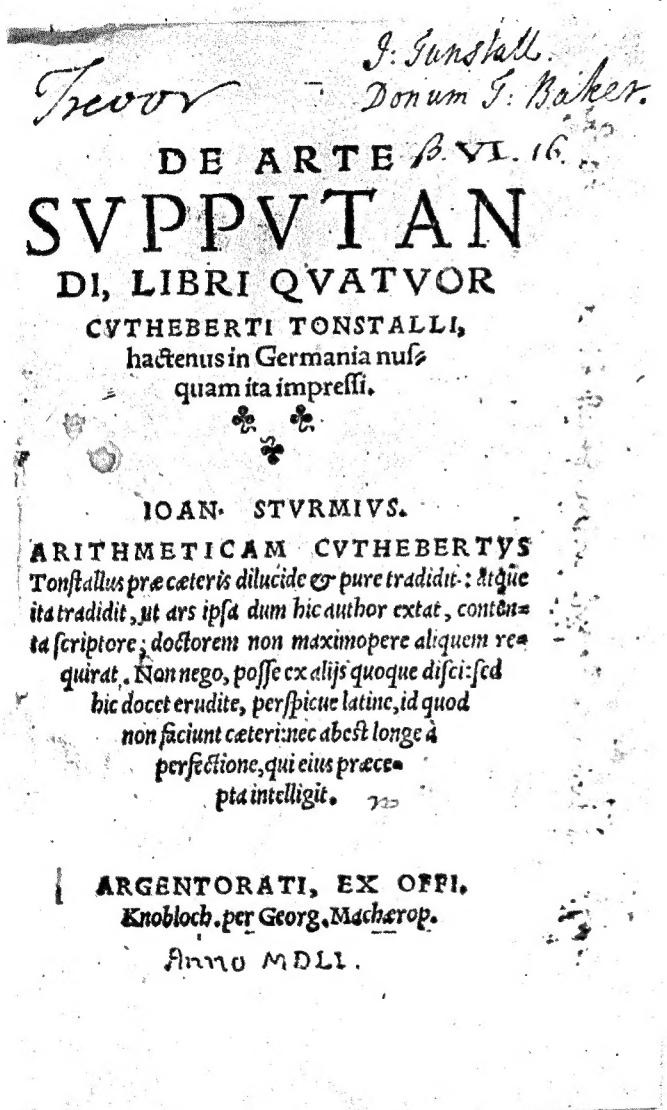
These two books are written to supply this necessary information. Miss Ravenhill's book is very wide in its range and detailed in its presentation of matter. The contents include physiology, cookery, personal and school Hygiene. Throughout, notes of lessons are frequently given, illustrated by experiments, together with many valuable teaching hints.

Mr. Lyster's School Hygiene is more limited in range and deals more especially with Hygiene in school. The matter of the book includes consideration of the School Building, of the Scholar, and of School Medicine and Surgery, and is logically and clearly presented.

Both books are written by expert teachers of Hygiene, whose qualifications give authority to the facts and principles they urge. J. M. F.

Outlines of Physiography, an introduction to the study of the earth, by A. J. Herbertson. (London: Edward Arnold.)

This book is a distinct advance on the ordinary text-book of Physiography. It gives a lucid and methodical outline of the major movements and changes that take place on the surface of the earth, and of the varieties of land forms produced by the action of the internal and external forces acting on the earth's crust. A pleasing feature is the discussion of the organic activities that occur, and another that of the action of the physical conditions on the distribution of organisms. It is seldom that these are referred to in so broad a manner in an introductory book on Physiography.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ARGENTORATI, EX OFFI. Knobloch. per Georg. Machæropæ.
Anno MDLI.

science of Physiography depends, and to the gradual unfolding of the subject through these. A beginner should be introduced to each division of the science by reference to the actual features of the lithosphere, hydrosphere and atmosphere, of which he could obtain cognizance by actual observation and experiment, rather than by discussions on the earth as a whole. The book would also be of much greater value if a larger number of diagrams, especially in the chapter dealing with earth forms, were included. With a good teacher the book should prove of great value, and a student should obtain from its perusal a broad and clear idea of the main features of the world. D. W.

Exercises in Physics for the use of schools, by J. H. Leonard and Professor W. H. Salmon. (London: John Murray)

This book, which comprises 99 pages, has been drawn up to supply science teachers with examples for class use or home tasks, and can be obtained either with or without answers. The examples, which cover all branches of elementary physics, seem to be carefully graduated, and the answers, as far as a short trial goes, accurate. Material for graphical representation is given in the last eleven pages of the book. This is no doubt convenient from some points of view, but a better arrangement would have been to incorporate these in the general examples and encourage free use of graphical methods at all times, instead of placing them apart.

The notation in the mechanics' examples is satisfactory and free from those traditional inaccuracies which mar many books. In some of the electrical questions however there is a tendency to omit the names of the units, *e.g.* "a condenser which has a potential of five units" (p. 78) but this occurs only occasionally and as far as can be seen only in electrical questions.

The book should be useful to the busy teacher of large classes. G. H. T.

Education Papers. First Series. Armstrong College, Newcastle-upon-Tyne.

These papers, the production of the old students association, are an unpretentious contribution to educational knowledge. A noteworthy article is a symposium upon "A Training College Course;" the replies of a large number of old students upon the value of the course and the suggestions for improvement exhibit candid criticism and valuable suggestions. "Training College Students and Rural Schools" gives a detailed account of excursions lasting for a week that the

Newcastle Training College makes each year to Keswick, Ambleside and other places; in the "School Walk" a further College experiment is described. "The Fulwell method of Teaching Reading" is by a late student; it is a method that has special characteristics.

Among the other articles is a scholarly account of "De Arte Supputandi," a sixteenth century arithmetic by Bishop Tonstall. A copy of the title page of this book is reproduced and is interesting, seeing that the edition described was printed at Strasburg, and contains a commendatory notice by Sturm. "Cuthbert Tonstall has written a book on arithmetic that is clear and pure above and beyond all others: and he has so treated the subject, that, so long as this author is extant, the art of arithmetic stands in no great need of any exponent. I do not deny that there are things to be learned from others also, but this writer expounds in a learned and clear Latin style, which is not the case with all writers, and he who understands Tonstall's precepts will not be far from perfection." The "Papers" are an indication of activity. There must be a large amount of valuable information upon subjects relating to education in the Training Colleges of the country, and it is desirable that such information should be available in a printed form.

R. Ward & Sons, Printers and Publishers, High Bridge, Newcastle-on-Tyne.

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Training College Record.

CONTENTS.

Longmans, Green & Co., London, New York, Bombay, Calcutta.